CANADA IN 1880.

REPORTS

OF

TENANT FARMERS' DELEGATES

ON THE

DOMINION OF CANADA

AS A

FIELD FOR SETTLEMENT.

SECOND SERIES.

REMOTE STORAGE

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Lond. Sch. Econ. & Pol. Sci. Ex

MONEY.

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INTRODUCTION.

THE second series of the reports of farmers from England, Ireland, and Scotland, who visited Canada in the summer and autumn of last year, are now presented to the public. They have been made by the following gentlemen, some of whom were appointed as delegates by the farmers in their districts, while others, from their positions in the agricultural world, are well qualified to speak upon so important a subject.

MR. J. P. SHELDON, Professor of Agriculture, Wilts and Hants Agricultural College, Downton, Salisbury.

MR. HUGH MCLEAN, Rhu, Tarbert, Argyllshire.

MR. GEORGE CURTIS, Woodside, Silsden, Leeds.

MR. R. H. B. P. ANDERSON, Listowel, County Kerry, Ireland.

MR. W. CUBITT, Bacton Abbey, North Walsham, Norfolk.

MR. PETER IMRIE, Cawder-Cuilt, Maryhill, Lanark.

MR. J. SPARROW, Woodlands Farm, Doynton, near Bath.

MR. G. BRODERICK, Hawes, Wensleydale, Yorks.

MR. JOHN SAGAR, Waddington, near Clitheroe, Lancashire.

A paper has also been contributed by MR. JAMES RIDDELL, who has been residing in Manitoba for four years. Extracts are also given from the report of MESSRS. CLARE READ and ALBERT PELL, M.P., presented to Parliament in August 1880—and from the Chapter of the 'Colonization Circular' relating to Canada recently issued by the Colonial Office.

Containing, as they do, much information upon the agricultural resources of Manitoba, the North-West Territories, Ontario, Quebec, and the Maritime Provinces of Canada, and the suitability of the country generally for the settlement of British agriculturists and others, these reports will doubtless be read with interest by many, who, from various causes, are looking around for fresh fields in which their capital and energy can be invested to advantage.

The following are the classes recommended to go to Canada:

1. Tenant farmers, who have sufficient capital to enable them to settle on farms, may be advised to go with safety, and with the certainty of doing well. The same remark will apply to any persons who, although not agriculturists, would be able to adapt themselves to agricultural pursuits, and who have sufficient means to enable them to take up farms.

2. Produce farmers, and persons with capital seeking investment.

3. Male and female farm labourers, and female domestic servants (to whom assisted passages are granted) and country mechanics.

The classes who should be warned against emigration are females above the grade of servants, clerks, shopmen, and persons having no particular trade or calling, and unaccustomed to manual labour. To these Canada offers but little encouragement.

It is claimed that Canada offers advantages to steady hardworking men, unequalled in any other country. In the first place, the cost of reaching there is less—a consideration where a man has a family and is not overburdened with cash. The sea passage is also shorter; and the settler remains a British subject, not requiring to change his nationality before taking up a free grant of land, or acquiring the right to record his vote. Free grants of land, ranging from 100 to 200 acres, can be obtained in most of the provinces. In Manitoba and the North-West Territories a settler can obtain 160 acres free, and purchase another 160 acres at a nominal price and on very easy conditions, as set forth in the Appendix. In writing of this part of Canada, its rapid growth and development must be mentioned. The country was practically unknown ten years ago; now it possesses a city of 12,000 inhabitants (Winnipeg), besides many smaller towns. The rapid construction of the Canadian Pacific Railway must undoubtedly

be of incalculable benefit to the country, by opening it up and giving employment to a large amount of labour. Many other railways will doubtless be made in this vast territory as the country becomes inhabited.

The climate is suitable for Englishmen, and the country produces all the crops that are raised in England, and many more. Tomatoes, melons, grapes, peaches, and fruits ripen in the open air and grow to the greatest luxuriance, which is a sufficient answer to anything that may be said against the climate.

It is unnecessary to speak in detail of the various reports: they need no comment; and it only remains for persons who are thinking of leaving England to settle down in other countries, to place the advantages of Canada against the disadvantages, and form their own judgment as to its suitability for the settlement of agriculturists, and those engaged in the other industries that must follow in their wake.

The introduction to last year's issue is also printed, and the reports therein referred to may be obtained from any of the Government offices.

INTRODUCTION TO FIRST SERIES OF REPORTS,

PUBLISHED EARLY IN 1880.

The Hon. J. H. Pope, the Minister of Agriculture of the Government of Canada, caused a number of delegates representing tenant farmers in the United Kingdom to be invited to visit the Dominion in the autumn of 1879, for the purpose of examining its resources, and reporting on its suitability as a field for settlement.

In accordance with such invitation, the following delegates visited Canada :—

Mr. Biggar, The Grange, Dalbeattie, Kirkcudbrightshire.
Mr. Cowan, Mains of Park, Glenluce, Wigtownshire.
Mr. Gordon, Comlongon Mains, Annan, Dumfriesshire.
Mr. Elliot, Hollybush, Galashiels.
Mr. Logan, Legerwood, Earlston, Berwickshire.
Mr. Snow, Pirntaton, Fountain Hall, Midlothian.
Mr. Hutchinson, Brougham Castle, Penrith, Cumberland.
Mr. Peat, Lees House, Silloth, Cumberland.
Mr. Irving, Bowness-on-Solway, Carlisle.
Mr. Johnstone, Low Burnthwaite, near Carlisle.
Mr. Wilken, Waterside of Forbes, Aberdeenshire.
Mr. Bruce, Aberdeenshire.
Mr. Wallace, Nithsdale.
Mr. Welsh, Eskdale.

These gentlemen were, in the first place, clearly informed it was of all things desired that their own judgment should be freely exercised and entirely unfettered ; and that it was simply desired to obtain from them the result of their own personal observations, as well with respect to drawbacks as advantages, to shade as well as brightness. But it may be added that even this injunction was unnecessary for men of the character of those who were sent to Canada, and their constituents do not require to be informed of it.

The motive for thus inviting delegates and affording them facilities to see every part and province of the Dominion, in so far as practicable within the limit of time at their disposal, was to obtain testimony as respects the objects stated, which should not be open to the kind of question that might attach to any statements whatever coming from Canada, no matter on what authority they might be made.

The reports now published have been made by the delegates to their respective constituents, and have been handed to Mr. John Lowe, the Secretary of the Department of Agriculture of the Government of Canada, who has visited this country for the purpose of receiving and publishing them. This has only been done after careful revision by the delegate responsible for each.

The reports of two gentlemen who did not visit the Dominion as delegates, namely, Mr. John Maxwell, of Carlisle, and Mr. Chambré, from the County Tyrone, in Ireland, but who accompanied parties of the delegates as simple observers, are appended to this publication.

It is not thought necessary to make in this place any attempt to summarise the

reports of the delegates, as they will be read with very great and special interest by many in the United Kingdom. It may, however, be generally stated that those who went to Manitoba and contiguous parts of the adjoining territory, found the land to be of extraordinary richness, and specially adapted to the growth of wheat; while in the older provinces of the Dominion they found the conditions of mixed farming very much the same as in the United Kingdom. One of the delegates, Mr. Elliot, stated that, in the parts of the Dominion he visited, he did not find that cattle required to be housed longer than in Scotland.

Several of the delegates refer to the question why farms may be bought in the older provinces, and why the land is so cheap. In so far as respects price, in the last-named portion of the Dominion, it is to be observed that the value of occupied land in the older parts of a new country like Canada must necessarily, to a great extent, be governed—first, by the cost of clearing new forest land in the wooded parts; and, second, by the facility with which prairie land can be obtained free, to the extent of 160 acres, on the simple condition of continuous settlement for three years. It must be plain to all men that the fact of vast areas being open to settlement on such conditions will largely affect prices of occupied land a few hundred miles distant, to which there is connection both by water and rail.

A fact to be remarked is that the farmer who migrates from the British Islands to any part of Canada does not change his flag; nor does he, except to very slight degree, change his mode of life or his companionship. He goes among his own people, to conditions of life and society the same as those he leaves behind. He is not obliged to swear—before he can exercise the rights of citizenship, or in some States hold land—that he 'renounces for ever all allegiance and fidelity' to his Sovereign and the land of his birth.

The farmer who migrates from these Islands, moreover, has the satisfaction of feeling that he is assisting to build up a great British Empire, having for its seat the northern half of the Continent of North America, occupying a space as large as the whole of Europe, and containing agricultural, mineral, and commercial resources to be developed in the immediate future of almost illimitable extent; and, as the reports of the delegates will show, certainly beyond popular conception in this country.

The public lands of Manitoba, Keewatin, and the North-West Territory are in the hands of the Dominion Government; and those of the older Provinces, in the hands of the Provincial Governments. The regulations, as respects the Dominion lands, stating the conditions on which homesteads are given to settlers, and the prices at which other lands are sold, including the railway lands, are appended to this publication. Any further particulars on any point may be obtained by correspondence with a Government agent.

THE REPORT OF MR. J. P. SHELDON,

Professor of Agriculture at the Wilts and Hants Agricultural College, Downton, Salisbury.

INTRODUCTORY.

Sailing from Liverpool in the Allan steamship *Peruvian* on the 12th day of August last, I landed in Quebec on the 21st of the same month. I then proceeded by way of Montreal to Ottawa, steaming up the Ottawa river; I afterwards went to Toronto, and from thence, by way of the Great Lakes, to Manitoba, which was the extent of my journey westwards. Returning eastwards, I spent a considerable time in the Province of Ontario, leaving it at last reluctantly. I then proceeded to the Provinces of Quebec, New Brunswick, Prince Edward Island, and Nova Scotia, and my impressions of each of these will be found later on in this report, Having spent exactly ten weeks in the country, I sailed from Quebec on the 30th of October, and arrived in Liverpool on the 8th day of November.

On this occasion I took passage on the Allan mail boat *Moravian*, and I may now take the opportunity of expressing a high opinion of the great care and skill with which these vessels are navigated, the comfortable and elegant manner in which they are fitted up, the attention which the passengers get from the stewards, the courtesy which they never fail to receive from the officers of the vessels, and of the general cleanliness, neatness, and order which reign everywhere on board.

Going out on the *Peruvian* we had a large number of emigrants as steerage and intermediate passengers; and through the courtesy of Captain Smith, who personally conducted me over the ship, being clearly familiar with every detail of its management, I was enabled to inspect the emigrants' quarters. I wish here to bear testimony to the cleanliness and airiness of the sleeping rooms, to the excellent quality of the food supplied, and to the order, neatness, and discipline which prevailed throughout. To cross the great Atlantic in these boats is, in fact, a much easier, simpler, and pleasanter thing than people think; and if it really is the case that many persons, particularly females, are deterred from going to Canada on account of the voyage, I may here say that there is really nothing formidable in it at all. After a safe and rapid voyage, emigrants and settlers in her Majesty's Canadian Territory will meet with every attention, and receive the most ample instructions, from the agents of the Dominion Government, who are stationed at every necessary place for the purpose of giving assistance to those who need it.

It must be understood that I can only give in this report the unfinished opinions which may reasonably be expected to come of a tour far too limited in time. Opinions, in fact, I shall scarcely venture to give at all, except on certain points on which my information may be regarded as sufficiently definite; for the most part I shall confine myself to impressions, suggesting rather than drawing inferences. Many of the conditions which bear on the agriculture of Canada are so essentially different from those which prevail in the mother country, that dogmatism on the part of a mere traveller would easily develop into egotism; I shall therefore mainly confine myself to descriptions of what I saw, and to recital of what I heard.

It is to be feared that some writers on the agriculture of Canada, who were travellers and not agriculturists, have fallen into the error of expressing opinions of a too definite character; and were it not that I am a farmer by early training, and by subsequent experience until now, I should feel diffident at expressing even my impressions of the various Provinces through which I passed, of the different soils I inspected, and of the diversified systems of husbandry which came under my notice. I made it my business, however, throughout the journey, to see as much as possible with my own eyes, and to obtain the most reliable information within my reach; it is therefore competent for me to draw a picture which, if erring in any particular, will err unintentionally.

The Dominion Government, and the Provincial Legislatures, as well as the agents of the Dominion and private individuals almost everywhere, afforded me every possible facility to see the various sections of the country as thoroughly as circumstances admitted, and I found no

means lacking or withheld of ascertaining alike the advantages and disadvantages of the country as a field for the energies and capabilities of Old Country farmers. It is, in fact, easier by far for a stranger to obtain information in Canada than in England or Ireland, for the people are much more communicative, and they spare no pains to give ample opportunity for one travelling as I did to inspect their farms and stock, and the various details of their practice. My tour through Canada has been a singularly pleasant one—made so by the untiring kindness of the people; and interesting, on account of the many striking and beautiful scenes which the country affords.

MANITOBA.

A journey to Manitoba by way of the great Lakes Huron and Superior is full of interest. The scenery in many parts is beautiful; in some it is even grand and majestic. The various parts touched at in Georgian Bay present in some cases scenes of commercial activity beyond what I had expected to find. At Collingwood, for instance, and Owen Sound, there are substantial and thriving towns, with well-built hotels, houses, stores, and public institutions, and the country around and behind them is being rapidly cleared and brought into cultivation. At Owen Sound I had a very pleasant drive of ten or a dozen miles back into the country with Mr. Keogh, who, with marked kindness, hitched up his team to enable me to make the best use of the couple of hours which were at my disposal before the boat started again. We saw many farms on the way, most of which had a progressive air about them; there were also several fine orchards with excellent plums and apples, especially the latter, proving that fruit can be easily and profitably raised midway between the 44th and 45th parallels.

Passing along the northern coast of Lake Superior, I saw some magnificent scenery, chiefly in Thunder Bay and in the Fort William district. The last-mentioned place is at present the Eastern terminus of the Canadian Pacific Railway, a road which is being rapidly built, and which will in due time open up the illimitable resources of the North-West Territory. This road, in fact, is necessary to the colonisation of the North-West. Until it is built, indeed, and until there is a Canadian canal at the Sault Ste. Marie, the produce of the North-West cannot be forwarded to Europe without passing through United States' territory, unless, indeed the Hudson's Bay route can be made practicable.

The Province of Manitoba, so far as I saw it, is, as a rule, flat, wanting in trees, and, consequently, somewhat dreary-looking; but in many parts the land is of striking richness. I was up there in time to see the latter part of the harvesting, and I was certainly struck with the excellent crops of wheat and oats which were grown with the crudest cultivation.

On the day after my arrival, September 3rd, I saw a new string-binder at work in a crop of wheat in the Kildonan settlement, near Winnipeg; it was a very nice even crop, and would average, say, 25 bushels per acre of grain, whose quality was very good; the wheat was the "Scotch Fife" variety, not a heavy-headed kind, but it was a nice even crop, the straw rather short and weak, but clear and bright, and the grain was plump, well-fed, bright, and fit for the mill at once. This crop was sown on the 22nd of May, on first prairie sod—that is, on prairie land just then ploughed up for the first time—and as such sod is very tough at first, it may be imagined that the surface of the field was rough, and that the seed had been imperfectly covered; yet the seed was sown and the crop dead ripe within a period of 15 weeks. It is, however, no uncommon thing for wheat to be twice in the bag within 90 days—that is, sown, harvested, and thrashed within that period. I saw also a crop of oats which was sown at intervals, as the land was ploughed, from the 7th to the 17th of June; the oats were the black tartarian variety, and though not ripe when I saw it, I should say the crop would reach 45 bushels per acre. It was a strong, well-headed crop, and the oats promised to be a good sample. This crop, too, was on first prairie sod, on a farm belonging to Mr. Ross, of Winnipeg, but some ten or twelve miles away from the city.

Land increases rapidly in value near to the city. For this selfsame farm Mr. Ross paid 367 dollars; now he wants 3,000 dollars for it. It is 240 acres in extent, and the owner has put up a small house and a building or two on it, besides breaking up about half of the land.

The soil of Manitoba is a purely vegetable loam, black as ink, and full of organic matter, in some places many feet thick, and resting on the alluvial drift of the Red and Assiniboine Rivers. It is of course extremely rich in the chief elements of plant-food, and cannot easily be exhausted; the farmers know this, so they take all they can out of it in the shortest possible time, and return nothing whatever to it in the form of manure. By turning up an inch or two of fresh soil now and again, the fertility of the surface is renewed, and the same exhaustive system of growing wheat, year by year, may be pursued for a long period with impunity. It is true, in fact, that for several of the first years, at all events, manuring the soil would do much more harm than good; and, until an Act was passed to prevent it, the farmers were in the habit of getting their litter and manure out of the way by sleighing it out on the ice of the

frozen rivers in winter, to be carried away somewhere, when springtime and the floods came, and the ice broke up; now they leave it to rot in heaps outside the stables, and find it an easier task to remove the stable rather than the manure, when the latter becomes unpleasantly plentiful.

In course of time it is probable that the manure will need to be put to its legitimate use of improving an exhausted soil, or maintaining the fertility of a rich one. At a still later period the operation of subsoiling will bring up new earth from below, and there does not appear to be any probability that the better soils of the province will ever become sterile, providing that the farmers make use of the means they will always have at hand for keeping them up to the mark. At present, however, these rich wheat soils do not need improving; they are rich enough for years to come, and in some cases too rich for the welfare of the crop; much of the straw, therefore, is valueless, and really a cumber to the farmer. In the State of Minnesota I saw large quantities of it burnt to get rid of it.

The good prairie soils are known by the dwarf wild rose and the wolf-willow growing on them while still in a state of nature; at all events, the land is at once denoted good where these plants are found, though it is probable that there is good land on which they are not found. But there is a deal of inferior soil in the Province in places; this is chiefly alkaline soil, on which nothing that is profitable will grow in its present condition; in many places, too, the water is alkaline. Yet there is plenty of good water to be got in most places by boring for it, and in some instances a clear pure spring has been struck a very few feet below the surface.

It must not be supposed that the soil of Manitoba is fit only for wheat and oats. The wild grasses, it is true, are very coarse in character, and there are many weeds and worthless plants among them, yet cattle flourish on these immense plains of prairie grass. The "prairie meadows" are generally damp lands, situated near the swamps. "River lots" often stretch four miles back, and are 6, 9, or 12 chains wide, as the case may be; 6 chains at that length enclose 200 acres. The Province is not adapted to grow maize; it is too far north for that, but it will grow garden vegetables very well, and turnips and potatoes, beans and peas, in the fields with complete success, while such "tame" grasses as timothy and the rye grasses, and also red and white clover, grow satisfactorily on land that is at all decently cultivated.

Outside the city of Winnipeg I saw a large market-garden, run by a Yorkshireman named Longbottom, in which very large crops of onions, potatoes, carrots, peas, beans, tomatoes, celery, and a hundred other things, were grown in a rough and ready sort of way, but very profitably; there is a good market in Winnipeg for all kinds of garden stuff, and the earliest sorts command very high prices, so that our Yorkshire friend, as I was told on the best authority, is reaping a rich reward of his skill and industry.

I was much surprised to find among the Manitoban farmers one of my old Cirencester pupils. He had bought a farm of some 400 acres a few miles west of Winnipeg, paying, as was thought, the extravagant price of 20 dollars (£4) an acre. He declared, however, to me that he had the best farm in the locality, which may be taken as evidence of his being satisfied with it; and he was growing crops of turnips, potatoes, oats, etc., which were already a theme of conversation in the Province; this was done by better cultivation than the land of Manitoba is used to, and it is clear that the soil will produce almost any kind of crop in a very satisfactory way, providing it is properly attended to. And yet, how can we expect the rank and file of farmers to cultivate the soil carefully in a country which has such a superb abundance of magnificent land still unoccupied? In time, no doubt, better farming will prevail, and I hope my old pupil will set an example which will be worth extensive imitation; but at present land is too cheap and plentiful to admit of microscopic cultivation as we have it in England and Scotland.

The chief drawbacks in Manitoba, in the estimation of an Englishman, are these: Bad roads, bad water in many parts, the almost utter absence of trees except on the rivers' banks, the flatness of the country, and the long and severe winter. (And these remarks apply with even greater force to large tracts of country I have seen in the north-western portion of the United States.) No doubt the roads in time will be improved, though road-metal is very scarce; good water will be obtained in most parts of the country by boring for it; this, indeed, is already being done; trees will be planted to break the monotony of the scene, and, so far as the winters are concerned, I am assured by those whose testimony is worthy of all trust, that though the mercury may go to 30° below zero, yet the cold is not intolerable, but rather pleasant and bracing, *because the air is dry*. The flat, low-lying land in the vicinity of Winnipeg has hitherto been much flooded in spring-time, but an extensive and well-executed system of large open drains, which is now being carried out at the cost of the Government, will greatly diminish the evil, if not entirely remove it. There are other districts needing similar treatment, and, as the land is of excellent quality, they will receive attention in due time.

In the city of Winnipeg every household and personal requisite can be bought at not unreasonable rates; and, above all, agricultural tools and machinery of a character superior to the general run of such things in England are everywhere abundant. It is, in fact, one of the sights

most suggestive of reflection, to notice at the railway stations here and there, and at the dealers' stores, abundant supplies of labour-saving implements and machinery, which are cheaper, handier, and better made than many English goods. The cost of living is not very high; beef, by the side, in winter is about 7 cents a lb., beefsteaks in summer 15 cents, mutton in winter about 12 cents, and butter about 25 cents the year round. Eggs in winter are 35 cents a dozen.

The great features of Manitoba are: Land of excellent quality, very low in price, and in great abundance, and a climate which brings to perfection, in a short time, all kinds of cultivated crops. The value of land is 1 dollar (4s.) to 10 dollars (£2) an acre, away in the country, while near the city, in some cases, it is still higher. Out in the North-West Territory, however, the finest land can be bought at a dollar or less per acre, and actual settlers can obtain free grants of 160 acres for each adult, with a pre-emption right to 160 more on payment of a nominal sum to Government. I cannot, however, recommend English farmers of middle age to go there to settle, because they are entirely unsuited to pioneer life, and would have much to unlearn before they could learn the ways of the country; but young men with small capital and strong hearts and willing hands, even though they have been reared amidst the comforts of an English home, are sure to prosper in the new territory, providing they are steady and industrious. Being young, they are not too closely wedded to certain habits of life, and they would the more easily habituate themselves to the new conditions which they would encounter in the new country. But whoever may go to Manitoba from the Old Country, will do well to have a good look round before buying land, and, if possible, to pass a few weeks on a farm here and there, with a view of watching the processes on which husbandry is conducted in the North-West; and a man with a small capital and no encumbrances would do well to hire himself out to a farmer for a year or two before locating himself on land of his own. Land may be rented in Manitoba, and probably it would be a wise thing for an English farmer to rent a farm for a year or two, until he has learnt the country and the country's ways, and he will then be the better able to select the right sort of land for himself. Land may be rented as follows: the landlord provides the land and half the seed; the tenant the labour, implements, horses, and half the seed; the landlord receives one-third, and the tenant keeps two-thirds of the produce for his share of the business. Mr. Mackenzie, of Burnside, one of the largest and most prosperous farmers in Canada, lets off some of his land in the Portage la Prairie on these terms.

ONTARIO.

Of the southern part of this Province I cannot speak in terms other than of warm praise. Generally speaking, this favoured portion of the Province has a rolling, and, in some parts, almost a hilly surface; in certain localities, as that of Hamilton, for instance, the surface is much broken and almost precipitous here and there, but as a rule the great bulk of the land in this part of the Province, with the exception of rocky or swampy districts, is easily cultivable when it is cleared of timber and the roots are pulled out. Thirty or forty years ago, Ontario must have been a very heavily-wooded district, and the labour of clearing the hundreds and thousands of beautiful farms must have been prodigious; in the district to which these remarks more specially refer, the work of clearing is for the most part done, but there are still many extensive tracts of timber-land here and there, and most of the farms have a smaller or greater proportion of uncleared land on them. This land is kept to grow wood for fencing and for fuel.

This portion of Ontario may be regarded as the garden of the Dominion—literally as well as figuratively the garden—for it is there that apples, pears, grapes, peaches, melons, and the like, grow in the greatest profusion, and with the least trouble on the part of the farmer. Every farm has its orchard, and it is purely the farmer's fault if the orchard is not an excellent one, for the climate and the soil are clearly all that can be desired, and the trees will do their share of the work provided the right sorts are planted. It is usual to plant out peach and apple-trees alternately and in rows in a new orchard, and the apple-trees are at a distance apart which will be right when they are full-grown; this is done because the peach-trees come to maturity first, and have done bearing before the apple-trees require all the room; the peach-trees are then cut down and the apple-trees occupy all the room. These trees are planted in rows at right angles, so that there is a clear passage between them whichever way we look, and the land can be freely cultivated among them; it is, in fact, usual to take crops of wheat, or oats, or maize, from the land during the time the trees are young, and we often see fine crops of golden grain overtopped by noble young trees laden with fruit. A farmer may not, of course, look to fruit alone to grow rich on, but he often nets a nice roll of dollars out of it, and, to say the least, it is conducive to happiness to be well supplied with fruit, while to live in a climate and on a soil that will produce it abundantly is always desirable.

There are many kinds of soil in this part of the Province, most of which are fertile and easy

to cultivate. The most common soils are loams of one kind or another, comprising all the varieties included in the terms 'sandy' and 'clay' loams; then there are light soils of various kinds, clays, and marsh soils, most of them more or less impregnated with organic matter. Many of these soils—I speak now of farms that have been long under cultivation—were at first well adapted to the growth of wheat, but it appears that in many places wheat has been grown so repeatedly on the land, that it will no longer produce the crops of it that were formerly easy to obtain. The fact is, this one crop has been grown so very often that the land has become deficient in the elements necessary to it; the same land will, however, grow very good crops of other kinds—roots, clover, barley, peas, oats, and the like, while in some parts profitable crops of Indian corn are grown; the latter, however, is also an exhausting crop, even more completely so than wheat, but not so quickly, and can only be grown to profit on a rich soil and a hot climate. The difference between the two crops is this: wheat exhausts a soil of certain elements, leaving the rest comparatively untouched; but maize is a generally exhausting crop, less dependent on special elements, but feeding, as it were, on all alike; and so it follows that it can be grown for a longer time before the land shows signs of exhaustion, which at last is so thorough that fertility is restored with great difficulty. There is, however, a great deal of good wheat-land in Ontario, and much more of it to be cleared. The partially-exhausted land, too, will come round again, and will grow wheat profitably as before, but it is only good farming that will bring this about. The farmers of Ontario declare that they would hardly have known what to do with their land if it were not for cheesemaking, and particularly for the new cattle and beef trade with England. Wheat, wheat, nothing but wheat as a paying crop, was simply exhausting the land, returning nothing to it; cattle-raising paid poorly, because the demand was limited; and cheesemaking could only be profitably carried on in the districts suitable to it. But the demand arising in the Old Country for beef, and the improved means of transportation over the sea, have provided a new and profitable opening towards which the energies of the farmers are being directed. The raising of stock suitable to the English market is now a leading and profitable branch in this part of the Dominion, and it is encouraging to the cultivation of root and green crops, of clover, timothy, and other forage crops, of green corn, etc., for soiling. The growth and consumption of these crops, indeed, is the very practice that was needed to restore fertility to soils which had been injured by over-cropping with wheat. But numbers of the Ontario farmers seem to be so wedded to wheat-raising, that rather than go extensively into stock-raising and fattening, and the growth of various rotation crops, more after the English and Scotch models, they prefer to sell out and go to Manitoba and the North-West, a territory which is *par excellence* a wheat country, and which must soon become, perhaps, the greatest granary in the world. They are the more inclined in this direction because they can sell their Ontario farms at 40 to 100 dollars an acre, and can buy virgin soil in the North-West at 1 to 10 dollars. By an exchange of this nature they can easily establish their children in separate farms, a thing but few of them could hope to do in Ontario, where land is comparatively high. They have also the spirit of restlessness which permeates the Americans as well, but which is scarcely known in England.

These various influences are causing numbers of farmers to migrate in the direction of the setting sun, and the Americans themselves were never more crazed about the West than are the Canadians of to-day about their Manitoba and North-West Territory. They treat their land as a parcel of schoolboys treat an orchard of apples into which they are suddenly let loose: they rush about from one place to another, plucking an apple here and there, having a nip at it, and throwing it down, only to repeat the process at every tree they come to, thinking in this way to find the best fruit in the orchard. So it is with the Canadian and American farmer of the West. His farm is a mere machine, out of which he gets all the work he can in the least possible time, and he quits it for another, as his fancy suggests. It is of second or third-rate importance to him, for he can buy land on the Western prairies at a less cost than that of putting the first crop into it; and the affection with which an Englishman regards his farm, and the home of his childhood, is a factor at present almost unknown in the social life of our friends across the Atlantic.

In time this will change in Canada, and in England the old ties are rapidly weakening. It is well, or, rather, would be well, if English landlords would note this change of feeling, this loosening of the Old World sentiment, this infiltration of new ideas, which are surely, and not slowly, permeating the rank and file of British farmers. Steam has made the whole world a possible market for the products of any single portion of it, and, along with education, is making the people everywhere cosmopolitan in thought and feeling. To him who travels these things are clear, and I repeat that it would be well if those in power would recognise them without delay.

As a dairying country some portions of both Western and Eastern Ontario are clearly well adapted. The chief want of the country in this connection is that of streams, and springs, and running brooks; the smaller streams, in fact, are either less numerous than they were before the forests were cut away, or they are dry at the time when they are most wanted. But

the Belleville district, in Eastern Ontario, where there is indeed a great deal of excellent land, and the Ingersoll and Stratford districts, in the western portion of the Province, with many others here and there, are producing excellent cheese in the factories. It would appear, in fact, that wherever water for stock is available, dairy-farming in Ontario may be made a profitable business. The lack of water on some of the farms could without much difficulty, I should say, be made up by providing it in artificial meres and ponds, a practice which is common in many parts of England. The Canadian farmers, as a rule, are alert on questions which affect their interests, though less so than the Americans are, and that this water question, all-important as it is to dairy-farming and stock-raising, will in due time receive the attention it demands, is, I think, a point which may safely be predicted.

The Canadian dairy-farmer has several important advantages over his English contemporary, not the smallest of which is this: he can grow, at a very moderate cost, very large crops of forage for winter use; clovers and timothy flourish well on most soils in Ontario, and I should say that rye-grasses would also, though I did not find they were much employed, if at all, in the growth of forage; I think they might be used to advantage. It is also clear, from what I saw in many places, that he can raise abundant crops of swedes and mangels, and very good ones of carrots, parsnips, and the like. Here then, after the question of water, are the first requisites for successful dairy-farming. A rotation of crops is just the system to re-invigorate the older soils of Ontario, which have been over-cropped with wheat, and rotations work well in dairy farming. It is true that good natural pastures are scarce in the Province, if indeed there are any at all which deserve the name from an Englishman's point of view (the best grass-land I saw in Ontario was in the neighbourhood of London, and on the way to Hamilton); but, as I have said, clovers, etc., grow well, and they will answer capitally for pastures for a year or two, a regular succession of them being provided, and it is a simple matter to produce a large supply of green corn—that is, maize cut before it comes to maturity—for soiling in summer when the pastures run out.

The rotations may be as follows: 1. Wheat or oats; 2. Roots and green crops for soiling; 3. Oats or barley, seeded down with artificial grasses; 4, 5, and, if advisable, 6, Grass for forage and pastures. These rotations admit of endless variation, and in a country where no fossilised restrictions as to cropping exist, as they do in England, the farmer can always grow the crops that suit his purpose best. The practice at Bow Park is to sow western corn, which is a luxuriant cropper, thickly, in drills of eighteen or twenty inches wide; in this way the space between the drills is easily horse-hoed, until the corn is a foot or more high; the corn grows rapidly, and effectually smothers the weeds and wild grasses which grow vigorously in so forcing a climate. In Canada, as in England, the axiom is true that nothing cleans the soil of weeds so effectually as a heavy cultivated crop of some kind or other. If all the western corn is not wanted for soiling, the balance is cut and stocked while the leaf is still green, and the grain in the milk, and it is left out in the fields, and fetched in as it is wanted in winter; in this way it makes very good forage, and the stalks, leaves, and ears are all passed through the chaff-cutter, and all consumed by the stock. A similar system may be followed with almost any other kind of soiling crop—that is, making into forage for winter that portion of it which is not wanted for soiling.

As in the United States so in Canada, cheese-making has had more attention than butter-making, more skill and investigation have been applied to it, and cheese is consequently ahead of butter in average quality. It is, however, probable that the climate and soil are better adapted for the former than the latter; a moist, cool climate, and a natural herbage full of delicate and succulent grasses, appear to be best suited for butter-making: still, it is true that in France, for instance, excellent butter is made where the land is almost wholly under arable cultivation, and the cattle are almost entirely fed on artificial grasses, etc.; and again, a hot climate induces excessive respiration in cows as in other animals, and where this is, there is a larger expenditure of fat from the tissues, and a smaller supply of it to the milk-glands. Be this as it may, however, the cheese of Canada in many cases is very good, while the butter is scarcely of more than second-class quality; but it cannot, at the same time, be denied that the present high quality of the cheese is owing to the adoption of factories some twelve or fifteen years ago.

The same thing indeed may be said of the United States, whose cheese—some of it of high average quality, while some will rank as first-class anywhere—was of a very inferior character before Jesse Williams established the first cheese-factory near Rome, in the State of New York. It may be mentioned here that at the late International Dairy Fair in New York, the highest premium was carried off by Canadian cheese. Cheese-factories are already numerous in Canada, while creameries, on a corresponding system for butter-making, are as yet few and far between; and so it follows that cheese is a centralised and butter an isolated manufacture, the one receiving collective and the other individual study and attention. Thus it is that cheese-making is better understood, alike in its principles and practices, than is the case in the sister industry.

I must, however, not omit to say that I have tasted several samples of butter in Canada that would be hard to beat in Ireland, and harder still in our London dairy-shows.

The most conveniently-arranged and best-equipped cheese-factory I saw in Canada belongs to Mr. Ballantyne, M.P.P.; it is known as the Tavistock factory, and is situated a few miles from Stratford. The milk received daily, at the time of my visit, was about 17,000 lb. from nearly 1000 cows, but this was in the latter part of September. Mr. Ballantyne contracts with his patrons to make the cheese for them at $1\frac{1}{2}$ cent per lb., and the cheese I saw there was of very good quality, well made and carefully cured; the temperature of the curing-room is kept at about 80° for spring cheese, and 75° for summer, and at 65° for rich autumn cheese. The quantity of salt used is 2 to $2\frac{3}{4}$ lb. per 1000 lbs. of milk; the smallest quantity is used when the curd is driest.

Mr. Ballantyne for many years past has paid much attention to the subject of cheese-making, as also have several other prominent dairy-men in Ontario, and their united labours have done much towards raising the cheese of the Dominion in the estimation of buyers in England. Formerly there was great difficulty and uncertainty in making autumn cheese in Ontario; it was liable to be puffy and porous; and, as the whey was not always got well out of it, the flavour was frequently unpleasant. This difficulty has been completely overcome by 'ripening' the milk before adding the rennet to it. Mr. Ballantyne thought the matter out in his mind, and argued it to me in this wise: the summer's milk kept through the night is not so deadly cold as the autumn's, and so is in a more natural condition; its warmth has brought it into that state which produces the best cheese—that is, it has ripened somewhat, because warmth as well as time is necessary to the ripening of anything. He declares his belief, further, that the best cheese cannot be made from fresh, warm milk; because, though it is of course warm enough, and has never been cold, it has not the required age, and so is unripe. Hence he prefers that one-half of the milk he makes cheese from should be twelve hours old, and this being ripe enough in itself, ripens the fresh morning's milk when the two are mixed together. In summer the ripening of the evening's milk is enough for the purpose, but in the colder weather of autumn it is not, so the morning's and evening's milk are warmed up together to a temperature of 90° or so, and allowed to stand several hours before the rennet is mixed with them for coagulation, and this is done because the autumn's evening milk has been too cold to admit of enough if any ripening. As the mass of milk stands at the temperature named, it ripens, and the difficulty previously so common disappears, the autumn cheese having all the warmth and mellowness of character of the summer cheese, and it is not liable to be injured by the excessive heat of the summer climate; this autumn cheese, in fact, take it for all in all, is probably the best of the season, whereas it was formerly, in many cases, the worst.

The grand principles of the Cheddar system of cheese-making—which, by the way, is probably the best system the world knows—consists in the ripening which the curd gets after separating it from the whey, and before salting and pressing it. This ripening comes of keeping the curd warm, and exposing it to the air. But even in the Cheddar system it is well-known that autumn cheese does not mature like that of summer, and this Mr. Ballantyne declares is owing to the evening's milk of autumn not having a chance to ripen like that of summer. I was pleased to find that Professor Arnold, an able exponent of the Cheddar system, has done much good in Canada in teaching dairymen how to manage floating-curds—that is, by exposing them longer in the vat, and by developing more acidity to checkmate the taint which is common to floating-curds. The milk is generally delivered once a day to the Canadian factories, and the farmers, under pain of having their milk rejected, are required to take proper care of the evening's milk, and to deliver it in good condition at the factory. This done, the transit is supposed to do the milk good rather than harm.

Ingersoll is at once the oldest and most famous of the districts of Ontario in which cheese factories have been established; I was, consequently, interested in looking through a few of the factories near the town, in seeing the neighbourhood, and in attending the cheese market. My visit was made the occasion for calling a meeting of the farmers, factory-men, cheese-buyers, and others who happened to be in the town at the time. To Mr. Hately, a considerable exporter of Canadian cheese to England, I am indebted for the pleasure, interest, and information which this meeting afforded me. A most interesting discussion was the result of it, the subject being chiefly dairy farming. It transpired that some farmers receive as much as 47 dollars per cow for milk sent to the factories during the season, and the farmers were hopeful as to the future prospects of cheese-making in that part of the Dominion, though it is true that the industry, in common with all others, had recently passed through very trying times.

The dairy cattle, in some parts of Ontario, will compare not unfavourably with those of many parts of England. Shorthorn grades prevail, and it may be said that, wherever a better class of cattle are found, the improvement is due, as a rule, to the shorthorn element. In the magnificent herd of pedigree shorthorns at Bow Park, I found a collection of animals which, for number and quality, cannot in all probability be equalled elsewhere. It is clear that the climate and soil of Canada are well suited to maintain the purity and vigour of these animals, and there

is every indication that they have not deteriorated in any respect, but the contrary, in their new home in the Far West. There are some 300 animals on the farm, forming a herd that is well worth crossing the Atlantic to see. I spent three days at Bow Park, enjoying the company of my worthy friend Mr. Clay, and I should have liked to spend as many weeks or even months, in order to become familiar with the many beautiful shorthorns I saw there. Canada has in her midst, then, the largest herd of pure-bred shorthorns to be found, and she ought to make an extensive use of it to improve the bovine stock of the country, with the view of developing the new fat-stock trade which has sprung up with England. But Mr. Clay complains, and not without reason, that the Americans are ahead of the Canadians in appreciation of good stock, and that the greater portion of his young bulls have to find a market in the States. This ought not to be so, and it is no feather in Canada's cap that such a complaint should be made.

The county of Brant, near whose capital town of Brantford the farm is situated, is of a more broken and hilly character, with a more frequent occurrence of valleys and rivers where banks are steep, than we find to be the case in many other parts of the Province of Ontario. It is also well wooded, and generally picturesque. The Bow Park farm is situated within a long horse-shoe bend of the Grand River, which empties into Lake Erie. The river's bank on the west is high on the Bow Park side, and the land trends away in a gentle but somewhat varying slope down to where the river comes round again on the east; here, again, but on the opposite side of the river, the bank is high, forming a bold bluff, from which at many points a view of nearly the whole of the farm may be obtained. Thus the farm resembles, as it were, a huge plate, which is tilted up some sixty or seventy feet on its western side, the lower edge of it dipping easily into the eastern section of the river, which surrounds it except for a neck of land in the south of some five hundred yards in width. Along the east and north-east, where the land for some distance slopes slowly down to the river, the soil is a rich alluvial deposit, which is still being flooded and deepened by the swollen water in the spring; in the middle of the farm the soil is a strong sandy loam, and on the west a lighter sand, resting on a gravelly subsoil. The lower part of the farm grows fine crops of mangels, red clover, lucerne, and the like; the middle is well adapted to any crop you would like to put upon it, and the upper part grows a large burden of maize. It is thought by many in the Old Country that the soil and climate of Canada are ill adapted to the growth of clover; but here I find on the wheat stubbles as fine a root of red clover as I would wish to see anywhere, and one large field is covered with a luxuriant root of white clover, which, of its own accord, has sprung up on a rye stubble of the present autumn; white clover, in fact, is indigenous to these soils; the roadsides are covered with it, and the field in question is now providing a fair pasture for about forty in-calf heifers, while the portions of the farm which are really untouched parts of the primeval forest have a strong-stemmed undergrowth of red clover, wherever the brushwood has been trampled or cut away.

But fancy this magnificent farm, which erstwhile was forest and glade, now growing magnificent crops of grass, and grain, and roots, and supporting some of the finest the world has in it of the ubiquitous Teeswater bovines. This transition from Red Indian, and black bear, and moose deer, to Anglo-Saxon and Kirklevington Duchesses, to Duchesses of Barrington, and Oxford, and Woodhill, to Royal Charmers, Countesses, Lady Fawsleys, Polly Gwynnes, Roses of Sharon, Waterloos, Wild Eyes, and the like, to Princes, Dukes, Earls, and Barons of the same ilk, and all these glories of shorthorn fame supplemented by waving fields of grain, of mammoth mangel wurzels, and of thickly-carpeted clovers, is as remarkable as anything we meet with in this great young country of the West. The situation of the farm, and the views of the district which we obtain to great advantage from many points on the river's high bank on the west, are beyond compare the finest I have seen in Canada, or, for the matter of that, in the United States; and when we turn from these beauties of locality to witness the grand shorthorn cows, and heifers, and yearlings grazing lustily on the newly-seeded clovers, or on the primeval turf which for ages has formed a beautiful glade in the forest, we have the surroundings complete which go to make up a scene in which the soul of any Old Country farmer would take great delight.

The Bow Park Farm was purchased, a dozen years ago, from various persons who had settled upon it, by the Hon. George Brown, whose melancholy death a few months ago, by the bullet of a drunken assassin, filled the whole of the Canadian agricultural world with indignation and dismay. It was converted first of all into an ordinary dairy farm, in the days when Canada was coming to the front as a cheese-producing country; and a cheese factory, which is still standing, though put to other uses, was built for the convenience of the farm and of the neighbourhood around. Gradually, however, the dairy stock were improved; and as the soil developed animals in a superior manner, the idea arose to form it into a breeding establishment for stock of the best kind, and there is now upon it one of the largest and most valuable shorthorn herds in the world. There are in all nearly two hundred females and forty to fifty males, in many of whose veins runs the bluest of blue blood, while there is not a single animal among them who has not unexceptionable pretensions to patrician parentage. In lots of twenty to forty we find the females pasturing in various parts of the farm; and it is a sight worth travel-

ling far to see which we get in wandering slowly through the herds, each individual of which, with pedigree and all, is named at once by my friend Mr. Clay, to whom the chief management of the farm is entrusted by the Association to whom this great undertaking belongs.

Going first among the bulls, we came to the lord of the harem, the veritable king of the herd, an animal of surpassing merit, and a fortune in himself. This grand old sire, the 4th Duke of Clarence, who was bred by Colonel Gunter, of Wetherby Grange, is, to the best of my recollection, the most nearly faultless bull I have seen in this or any other country. He is a huge mountain of flesh and bone and muscle, and at first sight one would think that no two of his four legs could support the burden; but when we notice the grand development of muscle, and the grace and ease with which he moves, we think so no longer. His brisket is wide and deep, down to his knees; his shoulder, from the point of it to the brisket between the knees, measuring 4 ft. 9 in., is the deepest I have seen, and yet it is not in the least coarse or lumpy; his top is level, wide, and long, measuring 5 ft. 8 in. from point of shoulders to the square of the tail, and the roasting-beef is there in fine display. He is well sprung in the ribs, with great chest-room; equally well let down in the flanks, forming perfect underlines; the tail is set on as a tail ought to be, but not always is; the neck is wonderfully massive and muscular; the head has the true shorthorn character, and is withal very kindly in expression, denoting the good temper which the owner is known to possess, and which is no mean factor in the process of physical development. With a constitution unsurpassed, this fine six-year old bull is a most impressive sire, superseding in almost every case the influence of the dam; he is, in fact, thoroughly prepotent in the widest sense of the word, impressing his individuality on sons and daughters alike. His dam was the 4th Duchess of Clarence, and his sire the 18th Duke of Oxford, who was bred by the Duke of Devonshire. He traces back through Dukes of Claro, Wharfdale, York, and Northumberland, through Cleveland Lad, Belvedere, the Hubbacks, Ketton 2nd 710, Comet 155, and Favourite 252; and among the breeders' names are Bates and Colling, Hunter and Thompson. Here is blue blood enough and to spare, with a representative in every way an honour to it!

Among the younger bulls we come to the Duke of Oxford 46th, a most promising young animal of eighteen months, whose sire is the 4th Duke of Clarence, and dam the Grand Duchess of Oxford 29th. He has a great deal of the sire's character in all respects, and, if we mistake not, will prove a worthy scion of a grand line. Next we find a beautiful ten months' bull, Baron Acomb 11th, by the same sire, and out of Aurora, a rich red roan in colour, shapely and substantial, and most promising withal. By the same sire, again, there are Baron Knightley 5th, only four months old, 8th Duke of Kirklevington, a few weeks younger still; Earl of Goodness 8th, Prince Victor 2nd, Roan Duke 6th, ditto 7th and 8th, Waterloo Duke 2nd, Dukes of Barrington 11th and 12th, and Butterfly's Duke, animals whose ages vary from two to nine months. There are also many excellent yearlings by other sires, forming a collection of great merit.

Among the more celebrated and valuable females, we find Rose of Autumn 3rd, a pure Mantalini, and a very choice animal; she is now four years old, and a most beautiful cow, in-calf to Prince Leopold. This cow is simply grand in the shoulders, which are deep, clean, and beautifully set in. She has very fine bone, well-rounded ribs, a very small amount of offal, and excellent roasting joints. She walks off the ground bravely and gracefully, and fills the eye wealthily as she passes away. An excellent and well-preserved animal is Butterfly's Duchess, bred by Mr. Garne, of Churchill Heath, and imported. She has a wonderful substance, magnificent hind-quarters, and grand broad hips, with a top of surpassing breadth and evenness. Among the younger females we come to Royal Charmer 11th, ten months old. This excellent young animal has a beautiful skin, rich roan in colour, and very mellow to the touch, perfectly level top and even underlines, handsome head and neck, fine bone, clean and even points, and neat as a new pin. It is wonderful what matronly models these young heifers lay hold of. I cannot find time to describe more than a tithe of those I should like to mention, and it would, indeed, take a week to learn them properly first; nor, in fact, do I pretend to have picked out the best specimens so far, for where there are such a number of first-class animals, most of whom have many merits in common, while many of them have special points of excellence of their own, it would require the nicest judgment, formed after a long and careful inspection, to assign the many blue ribands which I should feel bound to award. Suffice it to say, that here is a great herd of shorthorns, in which all the finest families are more or less represented, and that they are flourishing in the best manner possible, and under conditions closely allied to nature.

One of the most striking facts brought out in connection with the Bow Park herd is this—the best-bred animals are clearly the best-developed ones in size and beauty, while their constitution is just as clearly of the soundest and best. No doubt the way in which all the animals alike are treated has no little to do with the superb health which they all enjoy. In no sense are they forced into condition by extravagant feeding. The food they get indoors is chiefly maize, of which stalk, leaf, and half-developed ear are passed together through the chaff-cutter. The older cows and heifers, in fact, do not receive through the summer even this modicum of

artificial food; they depend entirely on grass, when there is enough of it, as there has been through the past summer and the present autumn; and it is indeed surprising to see the excellent condition which one and all of them are in, on grass alone.

Animals of the Oxford, Kirklevington, Waterloos, and Roan Duchesses are individually and collectively superior, not only in personal merit but in general excellence, to those of less excellent strains. No falling off in vigour and healthiness of constitution, no sign of tuberculosis, and little, if any, of infertility, is known amongst them. Closely in-bred as they have been for many generations, transplanting them to newer soils and to a clearer climate than those of England has clearly re-invigorated them in the qualities which are usually enjoyed by animals which have not been artificially bred and tended, and lacking which the purest bluest blood is shorn of some of its most valuable properties. That a Canadian home admirably suits the high-born British shorthorn is the first impression given to any stranger who visits Bow Park, and, so far as the first requisites in successful breeding are concerned, it is clear that Canada is abreast of the Old Country; while my own observation during the three days I spent at Bow Park resulted in the opinion that less careful feeding and attention are needed there than here.

The sheep of Ontario are, on the whole, better than I expected to find, but they are open to improvement. It appears to me that Shropshires and Border Leicesters are calculated to improve the flocks, as shorthorns are to improve the herds, of Canada. In any case, however, the mutton I got in Canadian hotels was nice-flavoured, tender, and juicy, as a rule—in these respects better than that of our Cotswold sheep, or than of many of the Leicesters; but the Canadian sheep, as a rule, need improving in symmetry, if not increasing in size. The pigs, generally speaking, are very good, better, perhaps, on the average, than the pigs in the British Islands. I do not see that this class of farm stock needs much improvement. It is abundantly clear that Canada can produce excellent farm stock of all kinds, and that most of them are being improved. Until recently the inducements to improve them have not been strong enough, and in some of the Provinces little or nothing would appear to have been done in this direction. Now, however, the inducement is supplied, and it is probable that in ten years' time we shall find a marked reform in the quality and symmetry of the cattle and sheep, as well as a great increase in numbers. It is not easy to estimate the cost of raising and fattening beef in Canada, because the facilities vary in different districts. The following, however, has been communicated by an enterprising breeder of fifteen years' experience:

Raising, feeding, and attendance, first year, per head				24 dols.	
,,	,,	,,	second year, ,,	18	,,
,,	,,	,,	third year, ,,	24	,,
Total cost of fat beast weighing 1600 lb.				66 dols.	= £13 4s.

This would be about 4 dols. 12½ cents (16s. 6d.) per 100 lb. live weight, or 3½d. per lb. on the dressed meat. At the present rates of freight, in summer time, such an animal would be landed in Liverpool for £5 to £6, including food and attendance. It is probable, in fact, that Canadian beef will be landed in Liverpool, giving fair profits to all concerned, at 5d. to 6d. a lb.

A neighbour of mine in Derbyshire, an intelligent working man with a large family of children, went out to Canada, some ten or twelve years ago, with about £100 in his pocket. Having his address with me, I wrote to him, and he came to Toronto to meet me. His home for the present is in County Grey, Ontario, where he is farming 200 acres of rented land, in addition to a quantity of his own. For the rented land he pays 75 cents an acre—or, rather, this is what he agrees to pay, or its equivalent in some other form; the fact is, however, that his improvements have more than covered the rent. The land is cleared, but the permanent improvements done on it are such that they balance the rent; these improvements consist of fencing, draining, road-making, getting out stones, and the like. He raises cattle and sheep; the former are natives with shorthorn crosses, the latter too are natives, more or less improved. His fat ewes, sold in September, weight 180 lb., live weight, on the average. He grows rape for sheep-feeding—a practice very popular and profitable on the limestone soils of Derbyshire. Improved lambs are worth 1 dollar apiece more than native lambs, viz., 3 dollars to 3 dollars 50 cents, native lambs being worth 2 dollars to 2 dollars 50 cents. Oats fetch 30 to 31 cents; wheat, 90 to 100 cents; white peas, 60 to 65 cents; and barley, 50 to 60 cents per bushel. He ploughs rape under for barley, and, after barley, takes turnips, working, ridging, and manuring the land for them. He says that if butter fetches 15 cents a pound, the farmers do well. Cattle, when fat, fetch 3 to 4 cents a pound, live weight; these are native cattle; improved cattle are worth 5 to 5½ cents; while mutton is worth 4 to 5½ cents, according to quality and the time of the year. My old neighbour is not afraid of work, and he has his share of native shrewdness; he thinks a man will do better renting than owning his land in Ontario, because the rent is less than the interest on the money; he has prospered himself in renting land, and informs me he is now worth upwards of £1000. He would not have been worth one-fourth of it if he had remained in England.

I was much interested in a trip made to Bradford and Barrie, the latter a beautiful town on an arm of Lake Simcoe. At both these towns we had a meeting of farmers in the evening, and a lively discussion on agricultural topics. The farmers around Bradford declared that they had more than held their own, despite the bad times of the past four or five years. They considered their capital employed in farming had at all events paid five per cent. per annum during that period of depression. Previously, a farmer expected to buy and pay for an extra farm every eight or ten years, but of late years they have not been able to do so. The land about Bradford is a clayey loam, some of it almost a clay, and, as a rule, it is well farmed. More or less live stock are kept, and the land is farmed in rotations which are far from arbitrary or regular. Wheat is taken now and again; mangels, carrots, turnips, etc., are grown, and the land is generally seeded down with a white crop; if with autumn wheat, the timothy is sown in the autumn and the clover in the spring.

It is needless to suggest anything to the farmers of Bradford, except that they keep as many live stock as possible, making the other operations of the farm subsidiary to them; the live stock then will do their part in maintaining and increasing the fertility of the farms.

I had the pleasure of being present at the agricultural shows of Toronto, Hamilton, and Montreal, and I may say that I have seen no shows in England, except the Royal and the Bath and West of England, that can claim to be ahead of them in aggregate merit. The Montreal show is a new one, and in a short time will also be a very good one, no doubt; in any case, its permanent buildings are the best I have seen, either in Canada or the States. The Canadians throw themselves with great spirit into enterprises of this kind, and these shows are a great credit and ornament to the Dominion.

The school accommodation of the settled districts of Canada, and the quality of the education given to the children, are among the country's greatest merits and ornaments. The school-houses are frequently the most prominent buildings in many of the towns and villages, and throughout the Dominion the education of the young is regarded as a matter of vital importance, and one of the highest duties of citizenship. Everywhere primary education is free, the poor man's child enjoying advantages equal to the rich man's, and even in the higher branches of education in the colleges the fees are merely nominal, the State providing all the machinery and defraying nearly all the cost. The education of all children between the ages of seven and twelve is compulsory, and Acts of Parliament are in force under which delinquent parents may be fined for neglecting to send their children to school. It is impossible not to discern in these provisions one of the surest pledges of the future greatness of the country, and they obviously provide the poor man with advantages greater than those he will meet with in most parts of England. One of the first duties of a new district is to erect a school-house with ample accommodation; and so imbued are the people with the need and wisdom of such an act, that the provision is made with alacrity. Sectarian differences are arranged by the erection, where necessary, of separate schools, but in any case, the children are bound to be educated. It may be true that the support of the high schools should come in a larger measure from those who benefit by them, and in time no doubt this part of the educational question will be more or less modified, yet it cannot be denied that if the Provincial Governments have erred at all in this matter, they have erred on the right side. It is not competent for me to go farther into the question in this report, but it is important to notify to intending emigrants that, at all events, their children are sure to be provided, according to the measure of each one's capacity, with the knowledge which is power.

Among educational institutions the Guelph Agricultural College occupies an honourable position. The College was unfortunately not in session when I was there, and the President and Professor of Agriculture were both away at the Hamilton show, so that I saw the College and farm under unfavourable conditions. The Professor of Chemistry did all that lay in his power, however, to give me facilities for seeing the educational machinery of the College, as well as the farm buildings, the farm, and the stock. The following day I had the pleasure of meeting Mr. Mills, the President, and Mr. Brown, the Professor of Agriculture, at Hamilton. It is satisfactory to know that the College is being more appreciated and employed year by year by those for whose benefit it was established. Increased accommodation is now being provided, and there is a prospect of the College even becoming self-sustaining in time. Already it is a flourishing, though quite a young institution, and its influence is being felt on the agriculture of the Province. The students receive an agricultural education, in which science is happily blended with practice, and theory is borne out by demonstration. The farm consists of some 550 acres, on which a variety of experimental and practical crops are grown, and several kinds of pure-bred English sheep and cattle are kept, which, in their turn, will have an important effect on the country's future.

The taxation in Ontario is light, as it is everywhere else in the Dominion that I have been. At first sight it would seem to be heavier than in some of the other Provinces, yet it is not really so. It is assessed on the basis of valuation of property, and in this sense differs but slightly from the other Provinces. Land, and real property generally, leaving out of con-

sideration such cities as Montreal and Quebec, is more valuable in Ontario than elsewhere, yet the total taxation, including school-rates, does not often go beyond 25 to 30 cents an acre, while it frequently falls below those sums. Some districts have public property which nearly provides all the public money that is needed, and others are the more heavily rated for the present in order to wipe off sums of money which were given as bonuses to new railways passing through them. But nowhere did I meet with an instance in which taxation may be regarded as really burdensome; yet it will be expedient for new-comers to make inquiry into these matters before purchasing farms.

In the matter of assessing land for taxation, the farmers appoint a commission to value it, and it is revalued each year if thought expedient. If any dispute arise the land is looked over again, and the dispute may be privately settled by the judge. Practically the farmers hold their taxation in their own hands, for no direct imperial taxation is levied.

The farming in many parts of Ontario is of a higher order than I had been led to expect. West of Toronto, as well as north of it, I saw many farms in a condition which would be no discredit to any country whatever, but a great credit to most.

QUEBEC.

I have to regret that my time did not admit of my taking more than a glance at the Eastern Townships of this Province, because I am persuaded there is much excellent land in them, and a good opening for English farmers. They are situate between the cities of Montreal and Quebec, and near some of the cities of the United States, in all of which there are good markets for farm produce. The land, moreover, is much lower in price than in the better portions of Ontario, and farms for the most part cleared and fenced, in a fair state of cultivation, and possessing good houses and buildings, may be bought at the rate of £4 or £5 an acre. The district is rolling and the soil loamy; it is also well supplied with water, a valuable feature in dairy-farming and stock-raising. The climate is healthy, for it is here that Mr. Cochrane has raised his excellent shorthorns, and where he is now beginning to raise high-class Herefords in the place of them.

The agriculture of Quebec, generally speaking, is susceptible of improvement, and the same may be said of its cattle, sheep, horses, and pigs. In many parts the farmers plough the 'lands' too narrow, as if the soil were very wet. If such be the case, it were better to underdrain it. I noticed that grasses and clovers grew best in the numerous furrows. The fences of Quebec, as a rule, are quite equal to those of any other Province, and probably superior, because, being straight rail fences, they are not such a harbour for weeds as the zigzag 'snake-fences' too commonly are.

NOVA SCOTIA.

Of this province, too, I am unable to say very much, as I had not facilities for inspecting it equal to those with which I was provided elsewhere. In the neighbourhood of Truro I saw some useful land, in the Vale of Annapolis also, some of which is not easily excelled in any part of the Dominion. I was recommended, by his Excellency the Governor-General, to pay a visit to this fertile region, and I may fairly say that I should have missed a treat if I had not done so. The finest portion of the valley is found in the Kentville district, and in Cornwallis, in King's County; and the great feature of the locality is found in the dyke-lands, which have been reclaimed from the Bay of Fundy.

Of the nature of these lands I shall have to speak at some length in my remarks about New Brunswick, which Province also has a large area of them. There is, however, some very fine upland in the valley, which is admirably adapted to the growth of roots and grain, and to the raising of live stock of various kinds. The apples of the Annapolis Valley are famous in many countries, and though they do not surpass those of Ontario, they are an ornament to the country, and a source of profit to the people. It is probable that there is room for a limited number of English farmers in Nova Scotia, but, so far as I saw it, it does not offer inducements equal to those of the adjoining Provinces. The country for some distance out of Halifax cannot ever become valuable farming land, a great part of it being what is termed a 'hard country,' that is, rocky and short of soil.

PRINCE EDWARD'S ISLAND.

In some respects this is one of the most beautiful provinces of the Dominion, and it has probably the largest proportion of cultivable land. The soil generally is a red sandy loam, of one character throughout, but differing in quality. On the whole, the grass-land of the island, and the character of the sward, consisting as it does of indigenous clovers and a variety of the finer grasses, reminded me strongly of some portions of Old England. The people, too, are

more English in appearance than those of any of the other Provinces, with the exception of New Brunswick. This is probably owing to a cooler climate and the contiguity of the sea. The hotter climate and the drier air of the West seem to deprive the cheeks of some of the colour. The summer climate of the island appears to be almost everything that can be desired, but the winters are very long; the Northumberland Straits being frozen, the people are isolated from the mainland during the winter, unless, indeed, they cross over on the ice—a thing which may be done, and I believe not uncommonly is.

One of the most annoying circumstances in connection with the island winters is this: it commonly happens that in spring numbers of icebergs find their way through the Straits of Belle Isle, and collecting in the northerly half-moon coast of the island, melt there slowly, retarding vegetation sometimes a fortnight or more. The people believe that if a breakwater were thrown across the Straits of Belle Isle the climate of the Gulf of St. Lawrence would be vastly improved, and there are some who incline to the belief that in this event the St. Lawrence would be navigable the year round; if such results were at all likely to follow the closing of the straits, why—the sooner they are closed the better.

Prince Edward's Island is covered with a soil that is easy to cultivate, sound and healthy, capable of giving excellent crops of roots, grain, and grass—an honest soil that will not fail to respond to the skill of the husbandman. For sheep, particularly, the island appears to be well adapted, for the soil is light, dry, and sound, growing a thick-set, tender, and nutritious herbage. For cattle, too, it is suitable, though perhaps less so than for sheep. For horses the island has been famous for a long time, and American buyers pick up most of those there are for sale. It is not improbable, in fact, that taking them for all in all, the horses of the island are superior to those of any other Province; it seems, in fact, to be in a sense the Arabia of Canada. The sheep, as a rule, are fairly good, but open to improvement; the cattle, generally speaking, are inferior. Many of the sheep are now being exported to England, and the day I sailed from Quebec, Mr. Senator Carvell was shipping some 1200 of them, most of which were of very fair quality. This gentleman, to whom I am indebted for much kindness and information, informs me that sheep from the island cost 15s. a head in freight, food, and attendance, by the time they reach Liverpool, besides which there is insurance, which varies from 2 to 10 per cent., according to the season of the year.

It cannot but be regarded as a good thing for the island that Mr. Carvell has opened up a trade in this way, and it will be an inducement to the people to go more into sheep-raising—an industry for which the island is specially adapted. The cattle at present are not good enough for the English market, and they are not worth taking over. The Provincial Government has established a stock-farm near Charlottetown for the dissemination of better blood through the flocks and herds of the island; but so far the farmers have not availed themselves as they ought to do of this great advantage. The new trade with England will, however, in all probability cause them to put their shoulders to the wheel and to bring their cattle up to the level of the sheep. Beef and mutton are very cheap at present on the island; stall-fed beef in spring can be bought at 3¾ cents a lb., live weight, and grass-fed beef in October was worth only 2½, while dressed beef by the side could be bought at 4 to 5 cents per lb.; lamb and mutton by the quarter, and of very nice quality, was being sold in the markets at 5 cents per lb. Lambs were worth from 6s. to 10s. each, and ewes, 10s. to 18s.; while fat wethers and ewes were bought at 15s. to 20s. By exporting a few thousands yearly to England the price of sheep will increase on the island. The farmers complain that they receive but 17 cents per lb. for their wool; but so long as they sheer unwashed sheep they must submit to low prices.

The island grows very good wheat, and probably better oats than most other parts of the Dominion. Of the former, the crops are from 18 to 30 bushels, and of the latter, 25 to 70 bushels per acre. Barley, too, as may be expected, makes a very nice crop. Wheat at the time of my visit was worth 4s. per bushel of 60 lb., oats 1s. 9d. per bushel of 34 lb., and barley 2s. 6d. to 3s. per bushel of 48 lb. Winter-wheat is regarded as a precarious crop, being liable to be thrown out of the loose soil by the thaws in spring. The same thing holds good in Manitoba, and in Ontario I found that the farmers consider there is danger on the one hand, with winter-wheat that is too far advanced when winter sets in, of having it smothered by a too heavy fall of snow lying too long, especially on damp land; and on the other, of having it throw itself out of the ground by the heaving of the frosts and thaws of spring. In this event the dead plants may afterwards be raked off the land like so much hay. There is indeed, on these loose soils, room for the exercise of judgment in the sowing of the grain. Many farmers consider it a good thing to drill it in north and south as a protection against the prevalent west winds, while others try the experiment of leaving a row of old cornstalks standing at intervals of 15 or 20 feet. All this is done to prevent the wind blowing the snow off the plant and so exposing it to the withering frost, for snow is indeed a protection if there is not too much of it and the land is dry.

The island is noted for its large crops of excellent potatoes, which not uncommonly foot up

to 250 bushels an acre of fine handsome tubers. At the time of my visit they were worth only 15 to 20 cents a bushel, the tariff of 15 cents a bushel imposed by the Americans on Canadian potatoes having almost killed a once large export trade of potatoes to the States. Swedes make a fine crop, not uncommonly reaching 750 bushels per acre of sound and solid bulbs.

The island possesses one advantage which is unique and immensely valuable; I refer now to its thick beds of 'mussel-mud,' or 'oyster-mud,' which are found in all the bays and river-mouths. The deposit, which is commonly many feet thick, consists of the organic remains of countless generations of oysters, mussels, clams, and other bivalves of the ocean, and of crustaceous animals generally. The shells are generally more or less intact, embedded in a dense deposit of mud-like stuff, which is found to be a fertiliser of singular value and potency. The supply of it is said to be almost inexhaustible, and it is indeed a mine of great wealth to the island. It is also found to some extent on the east coast of Nova Scotia and New Brunswick. A good dressing of it restores fertility in a striking manner to the poorest soils; clover grows after it quite luxuriantly, and, as it were, indigenously; by its aid heavy crops of turnips and potatoes are raised; and, indeed, it may be regarded as a manure of great value and applicable to any kind of crop. Nor is it soon exhausted, for the shells in it decay, year by year throwing off a film of fertilising matter. This singular deposit is obtained, as a rule, below low-water mark, and in winter when the water is a solid mass of ice. Holes are cut through the ice until the mud is reached, and a powerful and ingenious horse-power scoop is used to fetch up the mud and dump it in the sleighs; it is then taken to shore and laid in heaps until it is wanted.

There is not much Crown land to dispose of in the island at the present time, but there are plenty of encumbered farms, more or less improved, which can be bought at 5 dollars to 35 dollars an acre. Taxation on the island is very light; it amounts to 2 to 8 cents an acre, according to value, or from 15 to 18 cents per 100 dollars valuation.

The educational advantages of the island are on a footing similar to those of the other Provinces. There are good roads, railways, etc., and many excellent harbours around the island. There are also thriving woollen and other mills, not to mention the lobster fisheries, which are a source of considerable wealth to the Province. There are, however, complaints that too many farmers have been tempted into the fishing business, to the neglect of their farms; that between two stools these men have fallen to the ground; and that the land is sometimes blamed for losses which really come of neglecting it. I was assured on the highest authority that farmers who have minded their business, have been steady, and have used a moderate supply of common-sense in their dealings, have made farming pay and become independent. It is true that a man is independent on a smaller sum in Prince Edward's Island than he would be in England, but at the same time there are numerous evidences of happiness and contentment among the people.

It appears to me that Englishmen of moderate ambition would find homes congenial to their tastes in this beautiful Province, and I have an impression that, with cattle and sheep raising and fattening for the English market, better times are in store for these hospitable and kindly islanders, many of whom I shall always remember with feelings of more than ordinary kindness. For agricultural labourers there is plenty of employment at good rates of pay. A man will get 80 dollars to 150 dollars per annum, plus board and lodging; or, minus board and lodging, but with cottage, keep of a cow, and an acre of land for potatoes, will receive 140 dollars to 200 dollars in cash. Farming, after all, cannot be bad where such wages are paid to men, and there is every inducement for the farmer and his family to do all the work they can within themselves.

NEW BRUNSWICK.

Apart from its wealth in timber and minerals, the latter as yet only just beginning to be developed, the Province of New Brunswick is well adapted to the pursuits of agriculture. In several portions of the Province there are soils which have certain very remarkable features and properties; and in many other portions I found soils that are easy to cultivate when once cleared of timber, deep in staple, and rich in the accumulated fertility of many centuries. Many of the upland soils bordering on the beautiful valley of the St. John River have every indication of being well adapted to stock raising, particularly of ovine stock. They are for the most part sandy or gravelly loams, sometimes approaching to stiffness, but generally friable, varying, no doubt, in depth and quality, but hardly anywhere good for nothing. It is probable, in fact, that, with the exception of Prince Edward's Island, New Brunswick has a larger proportion of cultivable soils than any of the older Provinces of the Dominion.

So far, however, the settled parts of the Province are chiefly along, or adjacent to, the rivers which drain the country; but there are yet many millions of acres not appropriated, as good, in all probability, for agricultural purposes as those that are—if we make exception of the 'dyke'

and 'intervale' lands. But these unsettled portions are for the most part still covered with a dense growth of timber, and I should hardly fancy that English farmers are either fitted for or would like the task of clearing it off.

The work of clearing these lands is, indeed, herculean, but it is generally supposed that the timber will pay for it. The land may be cleared at a cost of 12 to 20 dollars an acre, and it is said that a Canadian backwoodsman will cut down an acre of heavy timber in three or four days.

Let us take the new settlement of New Denmark as an instance of what may be done. Seven years ago the locality was covered with a dense forest, and the Danes who emigrated to it were very poor; now hundreds of acres are cleared, and are producing abundant crops of grain and vegetables, some of which are of a superior character, and the land supports a happy and prosperous colony, which in time will be a wealthy one. It is not too much to say that the condition of these people is far better than it would have been in the land of their birth. Take again the Scotch settlement of Napan, on the Miramichi: here we have also a favourable illustration of what thrift and industry will do. The settlement is mainly Scotch, but there are a few Irish among them, some of whom have prospered. One Irish farmer we met had become wealthy, 'and,' said a countryman of his to me, 'we call him Barney Rothschild itself!' It is at once pleasant and instructive to see these new settlements, for they are only what will be found all over the Province in course of time.

It would seem probable that a number of English farm-labourers might do the same, starting with free grants of land covered with timber, and clearing it as far as circumstances would admit of. They would in any case meet with encouragement from the Government and people of the Province, and with industry their reward would be sure.

Generally speaking, the sheep of New Brunswick are tolerably good, producing very nice mutton, and it does not appear that any special effort at improving them is at present called for. But the cattle generally are very inferior, and here it is that efforts at improvement are urgently required. It appears to me that good shorthorn, polled Aberdeen, or polled Norfolk blood would bring about the desired change. I saw, however, many cattle in the neighbourhood of Sackville that are good enough for all practical purposes, and fit for the export or any other trade. Here, then, the 'blue noses' have an example in cattle-breeding set them in their own country. It is clear that the climate and the soil are fit to produce excellent cattle, and if we find comparatively few such, it is man's fault, not the country's. Ontario is a long way ahead of any of the other Provinces in cattle, and this will give her, in the new trade, a lead which cannot easily be taken away.

The soils I have spoken of as possessing certain remarkable features and properties are the 'dyke' and the 'intervale' lands. Both Nova Scotia and New Brunswick are celebrated for the former, while the latter are a peculiarity of New Brunswick, in the valley of the noble river St. John. The dyke lands of both Provinces are found bordering on the inlets of the Bay of Fundy. Those I saw in Nova Scotia are in the neighbourhood of Kentville and Amherst; in New Brunswick I saw them at Dorchester and Sackville. As the name suggests, they are dyked in from the sea, from which they have been from time to time reclaimed. In many cases marsh grass is cut from saline swamps which have not yet been dyked, and over which the high tides for which the Bay of Fundy is noted, still during certain seasons, continue to flow. The grass is made into hay in the best way possible under the circumstances—on the ridges of higher land, on platforms, etc.—and is stacked on a framework which is raised several feet above the land, supported on piles; and it is a curious sight to see the water flowing under the stacks and in and about the piles when the tide is at its height. In one case I counted, near the town of Annapolis, upwards of 140 of these stacks, each of them containing a ton or so of hay. They are put up in this manner hurriedly, and are fetched into the farmyards, in winter, as they are wanted, to use along with ordinary hay, with straw and with roots, to which they are found to form a tolerable though coarse addition. But the dyke-lands proper are so fenced in from the water by a strong bank of earth thrown up some six or eight feet high, with a broad and substantial base, that the land within them is firm and solid, of excellent quality, and covered with a thick sward of coarse though vigorous and nutritive grass. The fertility of these reclaimed soils is unusually high; they are never manured, but they cut on the average upwards of two tons of hay to the acre—a yield which has been sustained for many years, and shows no signs of running out.

The land, however, under this system of farming is found to become weedy in the course of time, and it becomes expedient to plough up portions of it in rotation, at intervals of ten or twelve years, taking one crop of wheat or oats, with which new grass seeds are sown, to form the new sward which is desired. This once ploughing is found to kill the weeds for the time being, and they do not again become very troublesome for some years; and when at length they do, the land is simply ploughed up again in the way described.

These bottom-lands are valuable acquisitions to the upland farms adjoining, most of which have more or less of them attached; and they do much towards maintaining the fertility of the

uplands, obviating the necessity of using purchased fertilisers on them. These dyke-lands are in much request on this account, and they are worth from 50 to 150 dollars an acre, in a country where ordinary upland farms are not worth as many shillings an acre. The portions of these dyke-lands owned by different men are marked out for identity's sake, but are not fenced off from the rest. Each man cuts off the hay from his portion, and takes it home, sometimes several miles, and the aftermath is eaten in common by the stock of all the owners combined, commencing on the 1st of September. A few days before this date a committee of assessors is appointed to place a value on each man's portion of the land, and to decide on the number and kind of animals he shall send for pasturage. So it follows that we see very large tracts of land, on which hundreds of cattle roam about and feed at will.

The extent of these dyke-lands is said to be about 65,000 acres, and there is still a large area to be reclaimed. A large portion of the marshes was dyked by the French, previous to the conquest of Fort Beauséjour in 1754. Immediately afterwards they were taken possession of by the English settlers, who afterwards obtained grants of them from the Crown. The expense of dyking fresh marshes has ranged from eight dollars to twenty dollars per acre, and it is worthy of note that the system of constructing dykes and aboideaux adopted by the first French settlers is the one still employed. The system of cultivation is very simple, and consists of surface draining by cutting ditches 22 yards apart, 3 feet wide at the top, 2 feet 9 inches deep, and sloping to 1 foot wide at the bottom; about three years afterwards the land is ploughed in ridges of 6 to 8 feet wide, sown with oats, and seeded down with timothy and clovers. It then yields large crops of grass of a coarse description, and it would seem to me that careful draining, generous cultivation, and discriminating manuring would increase the quantity, or at all events improve the quality of the grass. By a well-devised system of drainage, carried out in a workmanlike manner, and by the free percolation of rain-water through them, these dyke-lands would gradually lose much of the saline element which at present is not favourable to the growth of the finer grasses, and they would become fitted to the growth of roots, green crops, and grain, while as pastures they would be greatly improved.

The 'intervale lands' of New Brunswick are, as the name suggests, found in the valleys. The name is peculiarly appropriate and expressive. In England we should call them bottom-lands or alluvial soils. They are, in fact, alluvial soils to all intents and purposes, with this peculiarity, they are still in process of formation. In some cases these intervale lands consist of islands in the rivers—and there are many such in the magnificent river St. John; but for the most part they are level banks on each side of the river, in some cases several miles wide, and reaching to the feet of the hills, which form the natural ramparts of the valleys they enclose. These intervale lands are rich in quality, and the grass they produce is very good. Like the dyke-lands, they need no manuring artificially. The dyke-lands, in fact, have such a deep excellent deposit of unusual richness, that manuring is superfluous; but the intervale lands receive a periodical manuring in the deposit which is laid on them each spring by the freshets of the rivers. They are, in fact, flooded more or less for several weeks in the spring of the year, and the deposit left by the receding waters is of a character to add fertility to an already rich soil, and, at the same time, to add to its depth. An inch or two of rich alluvial mud deposited on these lands each year is gradually raising them above the influence of the freshets; and they are to-day among the most valuable soils in the Province.

Much of the upland of the Province is of very good quality, excellently adapted to the growth of cereal, root, and green crops generally, and for the raising of live stock. Sheep in particular do remarkably well wherever I have seen them in Canada, and nowhere better than in New Brunswick. Little, if any, improvement in them is specially desirable, for they are already of very good quality in most respects, and they are of course well inured to the soil and climate. The cattle, on the contrary, are of a very inferior character; yet, at the same time, they are sound and vigorous in constitution, and therefore provide an excellent basis on which a very profitable breed of cattle may be built up by the use of improved blood from the Old Country.

There are in this Province millions of acres still unoccupied, except by a heavy growth of trees which form the primeval forest. The forests require a large expenditure of labour to clear them, and English farmers are not well calculated to do the work; but there are numbers of cleared farms which can be bought, with good houses and buildings upon them, at the rate of £3 to £8 an acre, and it seems to me that a practical farmer from the Old Country, especially if he has a rising family to help him, could hardly fail to do well in this Province. So far as the people are concerned, an English farmer would find himself quite at home here, and there is nothing in the soil or climate which would cause a painful disillusion. The geographical position of these maritime Provinces gives them a strong claim on the notice of the Old Country farmers who see the need of fresh fields and pastures new; comparative nearness to Britain, with regular and uninterrupted communication all the year round, offers a strong inducement for English settlers to come here; and the new trade in cattle and sheep which is rapidly growing up between the New and the Old Countries is sure to make farming in these Provinces

a profitable business to those who have the will and the judgment to lay themselves out to produce live stock of the quality which will find favour in England.

I must not omit to mention, with warm feelings of pleasure and gratitude, the unbounded courtesy and kindness which were extended to me by the Lieutenant-Governor of the Province, by all the members of the government, by various officials, railway and steamboat managers, and by private gentlemen and others, in every part of the Province I had the good fortune to visit. The memory of my visit to New Brunswick will be a source of pleasure to me as long as I may live, and I shall not cease to entertain feelings of more than ordinary friendliness toward many persons whose acquaintance I had the pleasure of making under such happy auspices.

It cannot be denied that to the average Englishman Canada is a country considered to be chiefly noted for fur-bearing animals, Esquimaux, Indians, and winters of extraordinary severity. It may be these, but it is something more. It is a country abounding in agricultural and mineral wealth, and it is a great country for timber. It has vast areas of excellent land, unsurpassed in fertility, and suited to the growth of many crops. It has already many thousands of prosperous and pleasant farms, and in a few years' time will have many thousands more. It abounds in game and fish, in the live stock of the farm, in fruit, and in cultivated crops. It is true that the winters are severe, but I am assured alike in Manitoba and Prince Edward's Island, in Ontario and New Brunswick, that the winters are bracing and healthy, full of enjoyment, and far more tolerable than a severe winter in England or Scotland; though the thermometer may now and again fall to 30° below zero, the atmosphere is always dry, and so the cold is not felt as severely as a much less extreme degree is in a damp climate.

The farmers of Canada work, it is true, but I doubt if they work as hard as we are in the habit of thinking. But in any case they work—not to do so would demoralise the men—and it seems that a drone cannot well exist in the atmosphere there. I believe I am correct in saying that the dignity of labour is more generally honoured in Canada than in England, and as there are fewer idlers, men in rags are scarcer. I do not, in fact, remember seeing more than two or three men in rags in the whole of my wanderings, and not many dirty, except the Indians, and not always these. Yet the farmers have not all plain sailing, nor do they grow rich without industry and thrift. Every country has its disadvantages, and Canada is no exception. There are sometimes violent storms which do injury to the crops and stock; sometimes they are troubled with grasshoppers, but their visits are few and far between, and they have only made their appearance about six times during the last fifty years. The Colorado beetle I only saw once. It does not seem to have yet reached Manitoba and the North-West Territory, and is not nearly so numerous as I had expected to find it, having confined its ravages more particularly to the United States Territory. Then, again, the weevil and the Hessian fly attack the wheat sometimes, and it is difficult when they do come to check their ravages; and lastly, the winters put a complete stop to agricultural operations, and the ploughing and sowing, as a rule, have to be hurried through in a limited period. The seed-time and harvest are very busy periods, but when the winter is over the spring comes at a bound, and vegetation grows at a rate which surprises Englishmen.

These disadvantages apply to the whole of North America, and not merely to Canada; but they have no apparent effect on the progress of settlement in the country. Men soon learn to accommodate themselves to these things, suiting their work to the seasons, and planning out beforehand various things that can be done in the depth of winter.

Three things in Canada strike a stranger powerfully: the vastness of the country; the unbounded faith the people have in the future greatness of the country; and the cheerful loyalty to the Old Country which is everywhere found. The liberty of the Canadian farmer, grand and unconventional as it is, and the independence of mind and of position, considerable and even complete as it is in many cases, do not develop into licence and recklessness, but into cheerful and generous habits of life. Loyalty to the Old Country and pride in their own are leading features in the political faith of the people; hospitality to strangers, and readiness to impart information and render services, are equally features in their domestic life; while a living faith in the future of the Dominion, based on a knowledge of its exhaustless natural wealth, and of the inherent energy of its citizens, is prominent in their conversation. It is not the aristocracy of birth, but that of labour and of brains—personal merit, in fact—that holds a foremost place in the estimation of the people.

The new departure which has recently begun in Canadian farming—that of sending cattle and sheep alive and dead to England—has elated the farmers of Canada in a degree corresponding with the depression it has caused among the farmers of England; it is a new and unexpected source of wealth to them, and they are laying themselves out to make the best of it in the future. So far the country is free from diseases of stock, but how long it

will remain so depends almost entirely on the action of the Government. Stringent regulations are in force governing the importation and exportation of fat and lean stock, and qualified inspectors are on the alert in many places; American cattle are not admitted except in bond, passing through the country under strict supervision.

So far the Canadian cattle-trade has expanded rapidly. It commenced in 1877 with 7000 to 8000, three-fourths of which were American; in 1878 there were 18,000 sent to Europe, two-thirds of which were American; in 1879 there were 28,000 sent, all Canadian, because American cattle were then excluded; in 1880 it is computed 35,000 will be shipped; and in five years it is predicted that 100,000 will be available. For these figures I am indebted to Dr. McEachran, of Montreal, who is the chief Government inspector of imported and exported cattle.

The landlords and farmers of England, and many writers and speakers on agricultural matters, profess to find some consolation in this: that with an increase of trade and commerce, freights, will rise, and a check will thus be placed on transatlantic importations of stock. I have no doubt this hope will prove to be a mere *ignis fatuus*, and I cannot participate in it. I have it on very high authority that there is no probability of freights rising, but the contrary, rather. With steel-built ships, compound condensing engines, and various mechanical improvements, to which at present no limit can be placed, the cost of sailing a ship across the Atlantic is being yearly lessened.

The expenditure of coal on board steamships is being rapidly reduced, and the size of the ships increased, so that a 5000-ton vessel can be navigated now at very little more cost than was entailed by a 2000-ton ship ten years ago. Freight at 25s. a ton in 1880 pays better than freight at 50s. a ton did in 1870. This is brought about by enlarged ships, a smaller expenditure of coal, and a larger space on board for freight. The ships now building, though larger than those running, will run at less cost and carry very much more freight, and although freights for some time past have been and still are very low, it is an open secret that freights pay far better than passengers. In any case, the rate at which ships are being, and will be, built is greater than any probable increase in the volume of freights. Hence it is hardly possible that English farmers may find any solid comfort in a hoped-for rise in freightage.

I come now to the last point of discussion and inquiry in this report, viz., Is Canada a suitable field of settlement for English farmers? I approach this point with caution, because I am aware of its great importance. But the question rather is: Are English farmers suitable for Canada? It appears to me that Canada, as a country, has many advantages, and a future in all probability very important. She is a rising country: this cannot be denied; and she cannot remain in her present stage of development. I think, then, that many of our middle-aged English farmers are unfitted by their habits of life and of labour to battle with the work which would fall to their lot in Canada. But there are many others who are fitted for it, particularly those who have led laborious and active lives; and our young farmers would soon fall into Canadian habits. Men with large families who are not afraid to work would, as a rule, do well in Canada. The younger men would not long be at a loss in pioneer life in Manitoba, but it is scarcely the place for a man who has been long accustomed to English methods of farming; that is, they would have to unlearn their old methods and learn new ones, but it is only fair to add that the land and climate of Manitoba are so generous that very careful cultivation is at present alike unnecessary and scarcely profitable. These latter men, as it seems to me, would be happier, and their wives would be more content, in Ontario, or New Brunswick, or Prince Edward Island. They are not suited to the cruder life of the Far West. A man with a capital of £1000 would do well in one or other of the maritime Provinces, or in the Eastern Townships of Quebec; one with £2000 would do well in Ontario. A man with little or no capital should either go to the Red River district or take a free grant of land in one of the lower Provinces. But any man should look round him for some time, and get into some kind of employment before he buys a farm or takes up a free grant. Looking at the increasing competition which British farmers have to meet, and at the heavy rates, taxes, rents, bills, and wages they have to pay, I have no doubt many of them would do better out yonder, and their families would do better than they can in England, providing always that they are not afraid of work, and are sober and frugal.

It is said that Canada is the place for a poor man, and this no doubt is true; but it is also the place for a man of means, for capital tells a tale there. It is not probable, however, that many farmers of capital will face the ills they know not of in Canada, and indeed I would not advise anyone to go there who is doing well in this country; but, then, it is hardly fair to Canada that only poor men should go there as farmers, for money is wanted to develop the riches of the soil—not labour only. I know farmers in England who toil year after year, and live very carefully, without being any forwarder at the year's end than they were at its start; this sort of thing to me seems very hopeless, and I would say to such men: 'You will get along faster in Canada.' There is not, and has not been, a better time than the present for English farmers going to Canada. Canada is just recovering from

a period of depression during which the value of land has become reduced, and it so happens that many of the farmers of the Lower Provinces are looking wistfully at the wonderful prairies of the North-West, and are anxious to sell their present farms and go there with their rising families. They, it is true, are fitted to go, and it seems to me a nice arrangement that English farmers of capital should take their places. It would seem, indeed, that the systems of farming to which English farmers have been long accustomed are well adapted to restore condition to the land, while Canadian methods are better suited to the present condition of the North-West. It is at the same time true that many English farmers would do well in the North-West, particularly those whose capital is small, and who are not too old for pioneer life. Yet in the Lower Provinces they would find farms and homes more in keeping with those they leave behind in England. Their sons, in turn, will move in the direction of the setting sun.

REPORT OF MR. HUGH McLEAN,

Rhu, Tarbert, N. B.,

THE DELEGATE OF THE KINTYRE AGRICULTURAL SOCIETY.

'YESTERDAY (Nov. 19, 1880) Mr. Hugh McLean, Rhu, the delegate appointed some time ago by the Kintyre Agricultural Society, to visit Manitoba, and report as to its suitability for emigration purposes, etc., addressed the members of the society and others in the Town Hall. The delegate was accompanied to the platform by Provost Greenlees, ex-Provost Galbraith, Rev. J. C. Russell, David McGibbon, Esq., Chamberlain to his Grace the Duke of Argyll; Lachlan Clark, Esq.; Robert Aitken, Esq.; John Gilchrist, Esq.; Charles McConachy, Esq.; James B. Mitchell, Esq., and James Littlejohn, Esq. David McGibbon, Esq., occupied the chair, and briefly introduced Mr. McLean.'—*Campbelltown Courier*, November 20, 1880.

The following is the text of the report:

After certain preliminary arrangements in London had been completed, it was fixed that I should sail for Quebec on the 5th August, 1880, by the Allan Line steamer, *Sardinian*, Captain Dutton.

The *Sardinian* is a magnificent specimen of marine architecture. Her tonnage is 4376. She is divided into seven water-tight compartments, is propelled by a pair of direct-acting compound high and low pressure engines of 2800 horse power, and maintains a speed of 14 knots per hour. She is strongly built, carries ten life-boats, has accommodation for 180 saloon, 60 intermediate, and 1000 steerage passengers. The steward's department is managed in the most approved manner, nothing is wanting to conduce to the comfort of the passengers; and every attention is shown that the most fastidious could reasonably desire. The berths are comfortable and well ventilated, the lights entirely under the control of persons appointed to light and extinguish them.

The ship arrived at Moville about 11 a.m. on the 6th. We sailed in the evening about 5 p.m. The time did not hang heavily on our hands, being enlivened by Captain Dutton's lectures on the Pyramids, Tabernacle, etc., together with very good music, instrumental and vocal. Having seen five icebergs, one large whale very close to the ship, and a school of five others about three miles off, everyone was pleased to find that we were entering the straits of Belle Isle. The beauty of that sail up the St.-Lawrence was exquisite.

Having arrived at Point Levi on Sunday the 15th, our luggage was taken to the Custom-House shed for examination. We then procured tickets for Montreal. Perhaps what attracts one's attention most of all on the way is the charred stumps of trees that stand up like men, say in spaces of six or seven feet apart. They give a desolate look to the country, as if the hand of the destroyer was wasting it. The impression to a Scotch mind is waste. Beautiful plantations (for he can as yet scarcely realise that they are forests) are on fire. It makes him feel sad to think that these woods are not in the home market. The land along the line of railway from Point Levi is occupied by French Canadians. Their crops seemed light. The oat crop was much lighter than at home.

Before leaving Point Levi (opposite Quebec), I was informed that his Excellency the Governor-General was in Nova Scotia, and had telegraphed to Ottawa that he wished me to visit the Annapolis and Windsor districts of Nova Scotia, Sussex valley in New Brunswick, and the Eastern Townships of Quebec, as well as Ontario, and the North-West. I felt that the task was onerous, that no time could be spared, and therefore on Monday presented myself at Ottawa. Here I found that the Hon. Mr. Pope, the Minister of Agriculture, was in England; that Mr. Lowe, Secretary to the Department, was in Quebec, and would not be back till next day. I was, however, received by Dr. J. C. Taché, who gave me a letter of introduction to Mr. Hespeler, Immigration Agent, Winnipeg. I then returned to Montreal. I should mention in passing, that Dr. Taché is the Deputy Minister of Agriculture, that he has written a very excel-

lent pamphlet on the Colorado potato-beetle, showing how to oppose its ravages. As the pamphlet is largely circulated throughout the Dominion, I do not doubt but that it has been instrumental, where the suggestions contained in it are attended to, in allaying, and in many places nullifying, the ravages of that destructive insect. The methods of destroying the beetle are, first, handpicking; and second, Paris green. The latter is very efficient.

Before leaving Ottawa, I was much impressed with the beauty of its public buildings, conspicuous amongst which, situated on a hill, are the Parliament Houses, consisting of three blocks, forming three sides of a square, all detached. The grounds around are very tastefully laid out. The Post Office is an elegant structure.

Ottawa is famed for its trade in lumber, which in Canadian means 'timber.' The saw-mills are a study in themselves. The railway station from which I went to Montreal is at Hull, on the east side of the Ottawa river. I saw the Chaudiere falls when passing the suspension bridge, and perceived that limestone is the prevailing rock of the district. There are slides, or timber erections, in the river, to guide the rafts that descend the river to the various saw-mills.

The land around Hull is very good, and judging from the condition of sheep and cattle, as visible from the railway, the grass must have a fattening quality. Crops of wheat, oats, buckwheat, and corn whirled past as the train sped from station to station. Wooden houses, with verandahs in front, constantly met the eye; wood fences everywhere, till at last night closed the scene. At length we arrived at Hochelaga station, which is the name of the original Indian village, on the site of which Montreal is built.

The city of Montreal is situated on an island. The Victoria Bridge crosses the St. Lawrence, its length being 9194 feet. The city contains many objects of interest, which were seen on my return; but on this day I visited Notre Dame Church, which internally is a most exquisitely-finished place of worship. The Crucifixion, the Apostles, the altar, the candlesticks, the gold and crimson decorations, all surpass description, and fill the beholder with awe and admiration.

I started for London, Canada West, by the evening train, but saw nothing of the country till next morning. When daylight came the morning was very wet. The country was beautiful. I found several fellow-passengers by the *Sardinian* were in the train. We were all glad to meet, but they dropped out one after another, and we were lost to each other probably for ever. We drove through a country farmed by English, Scotch, and Irish. There are good crops, good cattle, good houses. The fields are rich with golden-coloured grain. The orchards loaded with fruit. Everything to the passing visitor has the appearance of plenty. Now we pass fields of clover. Arrived at Port Union, we pass more clover fields. Swamps intervene, then light crops. By-and-by beautiful crops burst upon the view. Everywhere the fields are fenced with zigzag rails, which appears to me to occupy too much land; but the British Canadians adopt them universally. We come to Toronto.

We proceed and pass through Guelph. On the run we notice brick buildings going up to replace wooden houses, generally a fair sign of a prosperous farmer; but sometimes I was told emulation induces a man to build a fine house while his land is mortgaged. We pass Breslau, which seems by the map to be not far from the Banks and Braes o' Bonnie Doon; then through Berlin, Hamburgh, Stratford, St. Mary's, at which last place I changed for London, and saw the last of my last *Sardinian*.

I arrived at London and took train for Newbury, for the purpose of paying a short visit to a Kintyre settlement. I was driven over a clayey road from Newbury to Crinan by the light of the moon, and as yet saw nothing of the country. My quarters at Crinan were with the Rev. John Milloy, a native of Clachaig, Kintyre. In common with the whole settlement, I was roused about two o'clock in the morning by a thunderstorm. In the midst of it all I fell asleep, and awoke to find myself surrounded by glorious sunlight, and everything smiling.

I partly visited in the neighbourhood the farms of Messrs. John McMurchy, from Leanaghoich; Archibald McEachran, from Auchnadrain; James Stalker, from Achnacloich, Muasdale; Duncan Stalker, from the same place; Dougald McMillan, brother-in-law to Mr. John Gilchrist, Ballivain; Messrs. Duncan Campbell, from Ballochroy; Finlay McNab, from Cour; Donald McCallum, from Carradale; Peter McMillan, from Achnafad, and many others, all natives of Kintyre, and all evidently doing well. I then called on Mr. Neil Walker, from Achnaglaic, near Tarbert (who had no notice of my approach), and who gave me a hearty welcome. I took the liberty of putting inquiries to him, as to his success since he left Tarbert in the year 1874. His farm I found to consist of 100 acres, one-third or 33⅓ acres being under wood for fuel, one-third under wheat and hay, in proportions of about 18 acres of the former, and say 15½ of the latter; the remaining third contained 3 acres barley, 2 acres Indian corn, 14½ acres oats, and the balance summer fallow.

The summer fallow land is ploughed in autumn; it lies exposed to frost all winter, and to the sun till 1st September, when it is sown with fall wheat. He explained that when the land is first ploughed, it is so tough that one would suppose nothing could grow on it, but by being exposed to the frost in winter, and to the sun in summer, it moulders away until it is like the soil of a molehill. The soil in this part is black mould above and clay below, which, after

exposure, is good producing wheat land. If the clay is undrained, it is good for most crops, even for apples.

The first year Mr. Walker came to Canada he bought his present holding, which cost 3800 dollars, or £760, including log-house, barns, etc., he having also the straw of the waygoing crop. He sows 2 bushels of fall wheat and 2½ bushels of oats to the imperial acre. He sowed 30 bushels of wheat last year and had 234 bushels, which he considered very poor, and much below the average. He had the year before thrashed 250 bushels from 12 of seed. His potatoes are much the same as at home. The rotation he follows is to plough land that was under wheat (without grass) last year, in the fall, and sow oats in it in spring. After oats, summer fallow it; after fallow, sow wheat again, but putting all the manure the farm produces on the fallow. Turnips and mangel wurzel are not grown. He had 10 milk cows, 7 two-year-olds, 4 one-year-olds, 32 ewes and 20 lambs, 5 pigs, and 3 horses. He and his two sons labour the ground.

The following were the receipts and expenditure for the past year:

Produce of cows sold	$160·00
Two three-year-old stots	56·00
Wheat	233·00
Wool	47·12
Lambs	60·50
Pigs	50·00
	$606·62

EXPENDITURE—

Interest on $3,800	$190·00	
Taxes	20·00	
Labour	191·00	
Clothing	100·00	
Smith-work	5·00	
		506·00
PROFIT, £20 2s. 5d., or		$100·62

In giving the above, it is to be understood that the items interest, labour, and clothing are merely estimated, as he does not pay interest, and the labour is done by his family. The following were Mr. Walker's returns of various cereals since he emigrated in 1874:

YEAR.	WHEAT.	BARLEY.	OATS.	PEASE.
1875	170 bushels.	80 bushels.	600 bushels.	220 bushels.
1876	180 „	—	350 „	100 „
1877	310 „	—	220 „	105 „
1878	350 „	—	210 „	70 „
1879	330 „	—	165 „	37 „

He wished to impress on me that the land still requires great improvements to be made on it, and that if it were farmed on the same system that is adopted at home, it would produce double what it now does. With regard to the yield of the cows Mr. Walker stated that—in May last, 2019 lb. of milk were sold, which made 182 lb. of cheese, which, minus expenses of factory, realised 16·56 dollars, or £3 6s. 2d. In the month of June 2996 lb. of milk were sold to the factory, making 276 lb. of cheese, realising 17·60 dollars, or £3 10s. 5d. He stated that in July there was a drawback owing to the hot weather. In August and September, although there was less milk, it took less milk to make a pound of cheese. October is the best money making month in the year. He can average 20 dollars per month for six months out of the ten cows, and can sell 40 dollars worth of butter; that is, the cows produce 160 dollars, or £32, or an average of £3 4s. per cow per annum.

Next day I drove to Glencoe. Maple-trees abound along the route. I passed Battle Hill, the scene of a fight between the Americans and the British during the war of 1812. Before coming to Glencoe I was shown a farm, the owner of which had turned his attention to feeding

cattle for the home market. Passed the residence of a lady, a native of Tangy Glen. At Glencoe, which a few years ago was a small hamlet, but which now is a little town, having good shops, and doing a good business, I saw for the first time the sunflower, a large yellow flower that always faces the sun.

On the train from Glencoe to London I met Dr. McAlpine, a native of Lochgilphead. He wished me to visit Kilmartin, in the neighbourhood of London, and to call for his brother, a farmer there, but I could not do so. He corroborated Mr. Walker's account of the Canadian method of farming.

On the train I fell in with a Dutchman, Mr. Jacob Utter. He has a store, and owns several farms. He stated that Ayrshire cattle were rather tender for a Canadian winter, but that a cross between an Ayrshire cow and the Durham bull was the best breed they possessed; that a good cow would produce milk to make 3 lb. of cheese per day, that nine cows averaged 23 dollars each, or £4 12s., for six months. He mentioned that the general return for wheat throughout the country was 25 bushels per acre; oats, 50 bushels; barley, 35 bushels, and potatoes, 250 bushels. He gave the following rates of wages as applicable to the district: Man-servant, 20 dollars or £4 per month, with board and lodging; or for twelve months, 150 dollars, that is £30; maid-servant, 5 dollars or £1 per month. The following were the retail prices of various articles, given by him and converted into British money: Steak, 4½d., other beef 6½d. to 4½d. per lb.; Rio coffee, 1s. 0½d. to 1s. 5d. per lb.; sugar, 3½d. to 5¾d.; tobacco, 1s. 0½d. to 2s. 6d.; bread, 2 lb., 6¼ cents, or 12½ cents for 4 lb. loaf—6¼d.; pork, 2¾d. to 6d.; ham, 6d.

Having arrived at Sarnia, I made the acquaintance of Captain L. M. Morrison, of Corunna (Moore County), on the St. Clair River. His farm consists of 200 acres. I did not visit it until my return from Manitoba, but I will here state his experience. His returns were: Fall wheat, 25 bushels per acre; oats, 30 to 50 bushels. Of potatoes he just planted sufficient for home consumption. Plants them from beginning of April to beginning of May; digs them about 1st September. The following is the rotation he follows: Sows wheat this fall along with grass-seed, 1½ bushel wheat and ¼ bushel grass-seeds per acre (mixture being ⅔ of timothy and ⅓ of clover, often half the quantity is sufficient). Next year, a crop of hay; next year again, another crop of hay (no manure or top-dressing). Lets the land lie two years in pasture. He mentioned that he had land in pasture for four years, but that it was run out when he got it, having been twenty-six years in succession under crop. When a field is broken from lea, he puts oats in it (2 bushels per acre, sown with seed-drill). In some cases, where the land is dirty, he does not crop it the first year, but re-ploughs it several times during the season, and crops it for fall wheat by 1st September. Manure is put on the fall wheat. The land is not under-drained, but surface-drained. It consists of a strong clay with a vegetable mould on top. Clay land is the best land for wheat. Land that a crop of oats cannot be raised off here will raise wheat. It would raise oats if manured. His turnips were sown broadcast—1 lb. of seed to ¼ of an acre. Turnips so sown by him this year promise to be a good crop. Putting turnips into old land, they are sown in drills, but the drills are not raised; merely run the turnip-sower on the level surface about 13 inches apart, and thin them 10 inches apart.

Potatoes are planted in hillocks a pace apart. Indian corn is put in from the 24th May to 1st June. The reason for not putting corn in earlier is that it is liable to spring frost. It is put in for cleaning the land principally. Indian corn is cut whilst soft and the shaws green, to have the benefit of the latter for milk cows, as the shaws are better for cattle than hay. The grain is not sold, as producers in Canada are unable to compete with the United States.

Price of wheat, 1 dollar per bushel of 60 lb.; barley, 60 cents per bushel of 48 lb.; oats, 34 to 38 cents per bushel of 32 lb.; potatoes, 40 cents per bushel; good timothy hay, 10 dollars, or £2 per ton; Indian corn, 30 cents.

Of the two farms of 100 acres each which Captain Morrison owns, one is fully cleared of wood, the other is half cleared. He has in one farm nineteen acres under oats and corn, twenty under barley, twenty-two under hay and wheat, seven and five under hay, seven of orchard land, twelve under wheat, and the remainder in pasture; and in the other farm, fifty acres under wood, the remainder hay and pasture. He has in all 400 apple-trees and twenty plum-trees. He can sell 600 bushels of apples, all grafted fruit. His stock consists of twelve cows, twenty-eight head of young cattle, from half a year to three years old. The cows yield from 3¾ to 5 gallons of milk per day during the grazing and feeding months. Milk weighs 8 lb. to the gallon, which gives from 30 to 40 lb. of milk, or 3 to 4 lb. of cheese per cow per diem. He usually gets from 7 to 10 cents, or from 3½d. to 5d. per lb. for cheese.

Price given for fat cattle is 4¼ cents per lb., live weight; usual weight is from 1050 to 1100 lb., but he has had them as high as 1400 to 1500 lb. The proportion for dressed beef is 58 lb. per 100 lb. of live beef. The price of milk cows, any pure breed, is 25 to 35 dollars, that is £5 to £7; but he had been asked £20 for a thorough-bred Durham cow. Three-year-old steers, cost 35 dollars each, or £7. Average weight of sheep, 80 lb. Would pay for an imported Leicester tup 30 dollars, or £6, but usually gets them amongst his neighbours at from 5 to 10 dollars, that is £1 to £2. Draught-horses sell at 100 to 150 dollars, or £20 to £30 each, being from 15½ to 16 hands high; average weight of a horse is 1250 lb. He has two mares weighing 3000 lb., and 17 hands high, which he values at 400 dollars, or £80 for the two. Pigs are either

Suffolk or Berkshire. Coming in in spring, and killed next February, they generally weigh 250 lb.; price 6 to 7 cents per lb. Wool sells at 31½ cents, or 1s. 3¾d. per lb. Lambs at 3 dollars, or 12s. each.

Man servant, boarded, gets	15 dollars,	or £3	per month.
Lad servant,	8 „	or £1 12s.	„
Maid servant	5 „	or £1	„
Man servant for two months	20 dollars		„

Man employed per day during harvest, 1 dollar per day.
Taxes on 200 acre farm, 27 dollars, or £14 8s.

I sailed from Sarnia, at the foot of Lake Huron, on board the steamship *Ontario*, Captain Robertson, bound for Duluth, a town in Minnesota at the head of Lake Superior, and had for fellow-passengers several Canadian farmers. The following is the rotation followed by Mr. Eckford, near Dunkeld Station, County Bruce, Ontario. He breaks up the field, sows it with pease; when pease are removed next year, he ploughs and sows it with wheat in the fall, about 15th September. Next year again the wheat crop comes off at the end of July; he then ploughs it, and in the winter takes out his manure and puts it in heaps on the field. As soon as the land is dry in spring, he spreads and ploughs it in. About 1st June he drills it up and sows turnips, twenty-two to twenty-four inches apart, and thins them at from twelve to fourteen inches. His first ploughing is as deep as the team can afford—about eight inches. The soil is clay.

We left Duluth by rail for Winnipeg.

From what could be seen that evening on the railway cuttings, the soil was black vegetable mould. I could see that a great level tract, interspersed with swamps, formed the general feature of the country.

Night having come on and rain, we arrived at St. Boniface, opposite Winnipeg, under most inauspicious circumstances. The streets of Winnipeg came into view by light of the windows, but they were mud. It was with a feeling of relief that we got landed at our hotel. The landlord, who was a Canadian Highlander, received us kindly, and, after some trouble to himself, owing to the lateness of the hour, and the absence of waiters and others, got us as substantial a supper as the circumstances could afford. The house, however, was fully occupied. I got a shakedown, and spent the first night in the Prairie City pretty comfortably. After breakfast an English fellow-passenger and I went to St. Boniface in search of our luggage which was to be examined. We grudged the 50 cents each that were paid on the preceding night, and were determined to walk rather than be fleeced again. The morning was dry, but the wooden pavements were as slippery as glass with the greasy mud. We reached the Red River, and crossed in the ferry-boat, which was of great beam and capacity, and could take not a few buggies, waggons, etc., with their horses and occupants, over each time. I forget the fare paid. We reached the opposite side, and then saw the steep bank which we descended on the previous night, which we now ascended with great difficulty. We soon thereafter got our luggage passed by the Custom-House officer. A person with 'checks' asked us if we wished our luggage sent to our hotel. We agreed that it should be sent, and had to pay 75 cents for two articles, or 150 for four. We smarted under this, but there was no help for it. I suspect that before we got the luggage to the hotel, and paid the ferry both ways, it was a pretty expensive item. My companion and I then called upon Mr. Hespeler, and received a map and printed regulations respecting the disposal of certain public lands for the purposes of the Canadian Pacific Railway. He also gave me a jotting of the route he suggested I should take, in order to see the country. Several things combined to prevent my following his route. I had, therefore, to devise a route for myself. By the time the call was made, and another call at a bank, we found that the steamer for Portage la Prairie, which was the place I intended proceeding to, had sailed up the Assiniboine; and as there was no stage till Monday I had nothing for it but to wait at Winnipeg.

In the interval, having been advised by Mr. Sinclair, Miller Street, Glasgow, to call on Mr. Gerrie, Winnipeg, who owns land at Sturgeon Creek, I did so, and Mr. Gerrie kindly offered to drive me to his farm when the roads became passable. At present they were absolutely impassable. I was, therefore, somewhat down-hearted at my bad fortune in losing the steamer and being detained at Winnipeg, but bore up the best way I could. Meanwhile, I was introduced by Mr. Gerrie to Mr. Bathgate, Main Street, Winnipeg, who informed me that coal had been discovered on the Souris River, and is in course of being worked, and some of it brought down to Winnipeg. He said that a railway is likely to be constructed between Winnipeg and the Souris River, also that coal had been found on the Pembina Mountain. Further, that great quantities of coal, of the very best quality, had been discovered on the Saskatchewan River, but that, in the meantime, this was very far distant. He also stated that on certain parts of the Canadian Pacific line of railway not only coal but other minerals were reported to have been found. Mr. Bathgate took me to an office in Winnipeg where I procured a specimen of the coal from the Souris River, which I have in my possession now.

The following is the experience of Mr. McCorquodale, Headingley:

He left Craignish, Argyleshire, in 1853, for Canada. Had many hardships when he came to Canada. Bought 100 acres at 1 dollar per acre; had to clear it all of wood. The land was in the township of Greenock, back of Kincardine, Lake Huron. He got on very well there. Two of his sons and himself, three years ago, came to Manitoba to see the country. It pleased him so well that he did not return to Canada. His sons returned temporarily. He himself spent six weeks travelling through the country, looking for a suitable place. He did not sleep in a bed all that time. He took this farm by share from the proprietor, Mr. Cunninghame. Mr. McCorquodale's terms were to work the farm and get half the profits. During the first year he looked out for a suitable place elsewhere, and purchased one of 320 acres for himself, and one of 320 for his son, in the south of the province. There is a good dwelling-house on each farm. The farms are partly sown and partly planted, ready for his going there next month. I drove through these farms on a future day. They were next to the Mennonite Settlement, on the way from Pembina Mountain. Other four sons bought each 320 acres at the back of Rock Lake, about 60 miles farther west. He considered that Manitoba was very far before that part of Canada he came from, but the roads, he said, were very far behind. This was certainly a great inconvenience to new-comers. 'Anyone coming here,' said he, 'taking up a house, has nothing to complain of, comparatively; but if one has not got a house, he must prepare to go over the country and pitch his tent, and that is not always agreeable.'

The following is a statement by Colin, his son, of the capabilities of the land presently farmed by his father:

'Wheat (2 bushels sown per acre) produced 35 bushels. The wheat is sown in spring. Fall wheat is not generally sown in Manitoba, but a test has been made, and it has succeeded. Reaping commences in August. The land is ploughed right up that same fall, when wheat is sown again in spring in succession for years. Weight, 64 lb., never less than 60 lb. per bushel.

'Oats average 75 bushels per acre, but it is not unusual to take 100 bushels off. Sow 2½ to 3 bushels per acre. Oats weigh 34 lb.

'Barley does well. Sow 2 bushels per acre, returns 60 bushels.

'Potatoes—3 bushels planted produced 87 bushels; 400 bushels have been raised per acre, but not on his father's farm.

'Turnips do well.

'Indian-corn does not ripen. Farmers cut it green, and it makes an excellent feed.

'Cabbages, carrots, lettuces, parsnips, cucumbers, melons, squashes, etc., do well.

'Have not yet grown apples. Old settlers have grown them.

'Prices—Wheat, 65 to 105 cents; oats, 42 to 75 cents; barley, 60 to 65 cents; potatoes, 50 to 125 cents. The two prices are fall and spring rates.'

All round is a grazing country. If a man cuts as much grass as will feed his cattle, it is then suitable for grazing.

The hot weather begins in June, about 1st. June is the wet month; more rain falls in it than in all the other months.

July is hot, with occasional thunder-showers.

August, warm and dry.

September, do.

October, cool but dry.

November, winter sets in about 10th. It sets in with frost and occasional falls of snow, but not much snow.

December, snow falls about 20th. The greatest depth on the level is 22 inches.

January, snow falls.

February, do.

March, begins to get a little warm; about 15th begins to thaw.

April, snow being off at latter end of March, begin to plough and sow. Weather pleasant for working.

May, usually fine weather, and devoted to sowing purposes.

The months of March, April, and May are spring; October is the fall.

Labour.—Farm servants, 16 dollars per month, £4.

Maid servants, 6 „ „ £1 4s.

Day labourers, 1¼ „ to 1½ dollar per day.

Taxes.—No taxes till this year, except the school-tax.

Water is very good in his place—the very best, pure spring; but in some other parts it is impregnated with alkali, and of a saltish nature.

Soil.—If the grass is short and smooth, and not a close sward, that ground is not good. If the grass is long, close sward, and the soil black clay loam, that ground is good. Manuring the alkali land with stable manure makes it good. The soil where alkali is, is of a sticky nature, and manure loosens it.

N.B.—I found this disputed elsewhere. Some say that two crops of beet absorb the alkali, others laugh at the idea, and say, 'Have nothing to do with it.'

Grain is sold without any trouble to merchants.

Milch-cows average 35 dollars, or £7. They can be bought at that in the country easily. Cows are cross between native cattle and Durham bull. Team of horses cost from 250 dollars to 300 dollars per pair, that is £50 to £60. Team of oxen, 140 dollars to 180 dollars, or £28 to £36. Mrs. McCorquodale says a cow will make 100 lb. of butter in the season, from May up to the end of September. Price, 20 to 25 cents—yielding £4 to £5. In winter the price is 50 cents. Sweet milk cheese is 20 to 25 cents. Eggs, 25 to 35 cents per dozen. Poultry: 1 dollar for young turkeys; 3 dollars for gobbler, and 1 dollar for turkey hens; 25 cents for common hens; 1 dollar each for ducks; 5 dollars for a pair of geese.

I left Headingley next morning, driven in an Indian cart, and proceeded to the River Sale. We passed through three very bad swamps, from three-quarters to one mile broad, and of indefinite length. These swamps might be drained into the Assiniboine and Sale Rivers without much difficulty. The Indian pony, Jeannie, dragged her owner and myself through the swamps and over the prairie grass, eating a bite and running as she ate, without being in the least fatigued. Her driver used neither whip nor switch, but only a kind word of praise, which she evidently understood, or a word of caution, which she understood equally well, or an appeal to energy, which set her all aflame when she came to a difficult spot. She was the best of ponies. Her owner's name was Emou.

Mr. Alex. Murray, of the hostelry of the River Sale, a branch of the Assiniboine, has a stock of twelve cows. The spring was so wet that he did not sow wheat. He says the carriage of wheat to Winnipeg takes 25 cents off the price. He mentioned that he had a farm for sale in the county of West Marquette, parish of Portage la Prairie, of which he gave me both particulars and price.

We left the River Sale next day in company with a Canadian, he being on horseback. We were both bound for the Boyne settlement. We passed some very bad sloughs and went through three large swamps. The prairie grass was very good and abounded with dog-roses, which dotted it all over, growing about eighteen inches high, and which were very beautiful. The principal grasses were bone-grass and buffalo-grass, a brown grass said to be good for cattle, also goose-grass, said to be very good for horses. These grasses indicate good soil. There is another grass in the prairie called by some arrow-grass, by others spear-grass. When drawn and thrown it sticks like a dart, and is bad for sheep and cattle. It is always avoided for hay. The arrows had dropt off when I was in the country. We arrived at Mr. Johnstone's farm on the Boyne after a long journey, during which the Canadian horseman was left behind, his horse having become exhausted, and he himself being obliged to dismount and walk. He was close to a farm at that juncture, which relieved my apprehensions for his safety.

We sojourned with Mr. Joseph Wells Johnstone, who came from County Oxford, Ontario, in 1870, and settled on this farm. Since he came to Manitoba his wheat has averaged 32 bushels per acre, but he has thrashed it at 52 bushels and at 60 bushels, and five years ago at 48 bushels. Last year it was 20 bushels. He sows 1 bushel and 5 pecks to the acre.

As to oats, he considers this the best of countries for oats, which weigh 42 lb. per bushel, and produce 70 bushels per acre. He has known, at Headingley, a field of ten acres produce 1010 bushels, or about 100 bushels per acre.

Barley weighs from 48 to 52 lb., and an acre produces from 50 to 60 bushels. Finds a market at Winnipeg, which is sixty miles distant from this. He grows no Indian corn. Price of barley last year, 60 cents; oats, 50 cents; wheat, 1 dollar; potatoes, 50 cents per bushel; butter, 25 cents per lb.; pork, 10 cents.

The system he adopts is: Starts ploughing about 15th June, and breaks land till 15th July. Leaves it lying till following fall. This ploughing is as shallow as possible—say 2 inches—and from 12 to 14 inches broad. In the fall he backsets it—that is, ploughs it the same way, being 3 inches deep and 12 to 14 inches wide. He harrows it in spring, and sows it with broadcast seeder. Has a 10-horse power thresher; charges 4½ cents for threshing wheat, 3½ for barley, and 3 for oats. Sows timothy and white clover. Timothy is a splendid success; has one piece which he cut in July, and expects to cut it again before winter. Mangel-wurzel does well, and so do turnips; also onions, carrots, gooseberries, currants, and rhubarb. Buckwheat grows well, so do cucumbers, melons, squashes, and strawberries.

With regard to flies, he says that the bull-dog is dreadful in July on horse and cattle—makes a horse lean, and he won't eat. The mosquitoes need no comment; they are very troublesome. The buffalo-gnat is very bad for horses and cattle in June and July. There is also the sand-fly, which is not very bad, but is found where there is high grass and scrub.

May is a very nice month.
June, very wet.
July, very hot; hotter than Ontario—up to 100° in the shade.
August, showery and cool.
September, fine weather.
October, very fine month.
November, fine month; clear and frosty.
December, snow—1 foot average; freezes very hard.
January, very cold; thermometer froze up last winter.

February, cold month.
March, not so cold ; snow begins to melt.
April, fine month.

The soil is black vegetable mould and clay bottom. The water is spring water. The water is good in the Boyne settlement. He says the heat, even when the thermometer is at 80°, is not felt so much as in Ontario, as there is always a fresh breeze. Although very cold in winter, he says that cold is more endurable than in Ontario, there being less changeable weather in Manitoba. He spoke of the Indians dying in the spring of the year from consumption, but attributed this to their being careless as to keeping their feet dry.

He has seven cows and three teams of horses. I took samples of oats and wheat. He has one crab-apple tree bearing fruit, of which he is very proud. Mr. Johnstone added : 'In Ontario all I could do was to make a living ; here I have made money.'

I should have mentioned that we passed the Poplars before coming to the Boyne settlement. We passed Tobacco Creek settlement, which lay east of us.

We started on the morrow for Nelsonville, but were overtaken by Mr. Inman, of the Boyne, who owns 800 acres of land there. Mr. Inman spoke of a blue flower that always indicated, by its presence, good water. He mentioned that he paid 10 dollars for 160 acres, and got 160 acres for pre-emption price. He bought scrip for the balance. He has 60 acres in crop.

Wheat will average	30	bushels	per	acre,	60 lb.
Oats	40	"	"	34	"
Barley	30	"	"	48	"
Potatoes	250	"	"	60	"

He stated that he does not make butter, but rears cattle. The price of wheat is 1 dollar per bushel ; oats, 65 cents ; barley, 60 cents ; potatoes, 25 cents in the fall and 50 in the spring; butter, 20 cents. Young cattle can be bought in the fall for from 7 dollars (£1 8s.) to 10 dollars (£2) per head. Hay can be made here, deducting expense, tear, and wear, for 1 dollar (or 4s.) per ton. Two tons of hay, with some straw, will winter a yearling well. A three-year-old steer is worth from 35 dollars (£7) to 50 dollars (£10). Hence he considers it is more profitable to rear cattle than to grow wheat. This is the way he puts it : 'Wheat was worth 1 dollar per bushel in Winnipeg last season ; the year before, 60 cents only ; 40 bushels can be taken in a sledge in winter over the ice, by a team of oxen, to Winnipeg, sixty miles distant. It takes five days to make the round trip.

'A man and his team is worth 2 dollars 50 cents per day .	$12·50
Expenses on road not less than	8·00
	$20·50
Price of 40 bushels, at $1	$40·00
Off expenses	20·50
40 bushels realise	$19·50

'Actual price of wheat 48 cents, or 2s. per bushel.'

He says that a man on the river brought in 12 sheep from Ontario, and they are doing very well, as he has lost none yet. Prairie dogs are dangerous for sheep. Water is good, and there is good timber near him. The Dominion harvesters are very bad [N.B.—the blackbirds who feed on wheat]. Wages, 15 dollars (£3) per month for farm servants, 25 dollars (£5) per month for haying and harvest months ; 6 dollars for maid-servants (£1 4s.). Taxes—School-tax is $\frac{7}{10}$ths of a cent per 1 dollar, according to the value of the land and other property ; he is also bound to give three days of road labour for each 160 acres he owns, or pay 1 dollar 50 cents per day.

The province is divided into municipalities, in each of which there is a warden and five councillors. In the municipality in which Mr. Inman lives, every man takes care of his own cattle, and is responsible for any damage done by them to his neighbours' crops from 1st April to 1st October. After that they are free commoners.

Pigs are profitable—8 dollars per 100 lb. They are fed on cracked barley.

Fife wheat is sown mostly on the Boyne, also red chaff wheat.

Oats—black oats chiefly, and white oats also are sown.

A man coming here to settle, should start with oxen for the first two years, until he gets enough crop to feed the horses. Having to erect a house, his horses are standing exposed to the weather, whilst the oxen will take care of themselves.

Having arrived at Nelsonville, I washed with soap and water in the hotel, and felt an uncommon irritation over my face, whilst my hair and beard seemed to be glued. I was told that this arose from alkali water, and that no soap should be used in washing.

Mr. Nelson, founder of the town, stated that when searching for water and digging his well, which is the well from which the inhabitants obtain drinking water, the vegetable mould

was 18 inches to 3 feet deep; then 3 to 4 feet of marly clay; then 5 feet of solid grey clay; then black soapstone. The water is generally found between the clay and soapstone. 'If not successful,' added Mr. Nelson, 'try another place.'

Wheat produces	20 to 30	bushels per acre.	Weight	per bushel,	64 to 66	lb.
Oats "	40 to 90	" "	"	"	38	
Barley "	40 to 50	" "	"	"	50	
Potatoes "	200	" "				

Mr. Nelson came to Manitoba in 1877. He had planted cucumbers, potatoes, cabbages—very weakly plants—on the 28th June, and they all came good.

Beets, turnips, and mangel wurzel do well.

Mr. Nelson corroborated previous statements as to the weather, remarking that the thermometer showed 110° in the shade in July, but that one could stand the heat better in Manitoba than in Ontario. He thought that the cool nights helped it. There are only two or three nights in the year, he said, that they don't use blankets.

He remarked that the thermometer froze last winter, but that the cold was endurable when there was no wind. He is a miller by trade, having grist mills which grind wheat, etc., at 15 cents per bushel.

Nelsonville is a thriving little place, and the inhabitants are kindly. It is destined to be a place of considerable trade, as it is on the track to Turtle Mountain, which is fast settling up. Mr. Nelson showed me next day tomatoes sown on the 10th May, which promised to ripen. I took samples, but they did not keep. He showed me cauliflowers, estimated by him at 4 to 5 lb. weight. Potatoes—early roses keep till the new ones come again. Plant them from 1st May to 1st June. I took two samples, and one potato from a seed planted on 3rd July. When the hill was dug there were seventeen potatoes on it, the sample taken being the biggest. I also took an average onion.

The Pembina Mount is a rising eminence, so gradual in ascent that I could not discover that I was ascending it. It is pretty thickly wooded from Township 4 north, but has not such uninterrupted good prairie. There is said to be a stretch of sandy land not very good for settlement beyond it, but good land comes again at Turtle Mountain, which is well wooded. Crystal City is on the east side of Rock Lake.

The Rev. Mr. Edwards, whom I met, stated that there was plenty of land all through the country that could be got from men holding the land on Crown patents. Tobacco Creek is considered the best settlement in the country. The soil is loose black vegetable mould, clay bottom. The water is very good there; wells can be had from eight to twenty feet deep. Wood is rather scarce, being from six to eight miles distant. Blackbirds (or Dominion harvesters, as Mr. Inman called them) resort to woods and water, but will not go far away from a good supply of both. All the land about Tobacco Creek is owned by private individuals. Mr. Edwards stated that 5 dollars an acre was the highest price asked for land, and from the location he considered it reasonable at that price.

Having now turned towards Mountain City we passed Minniwashtey, meaning 'good water,' also Adamson Creek and Deadhorse Creek. I was struck with finding boulders of granite on the road to Mountain City, being evidently floated there during the glacial period.

The number of houses that Mountain City rejoices in is eight, but it will probably be a big place by-and-by. After leaving Mountain City the stage proceeded to Stoddartville, where we put up for the night. Mr. Stoddart had very good crops. Next morning we started early, passing Calamity Creek and Liffey Creek, an Irish settlement, and the farm of Mr. Windram, M.P., Bluff, South Dufferin.

Ultimately, after passing various farms, amongst others, Mr. McCorquodale's, we came to Austervitch, a Mennonite village. Before coming to it we saw a great patch of alkali land. The crops in this neighbourhood were light.

We could, on looking back, now discover that we had descended the mountain, but the descending was not realised in the act. The Mennonites have very good crops. Their cattle pasture together in great herds. They had steam threshers, and all their houses were neatly thatched. They also had machine-houses to hold their agricultural implements.

An accident happened to our stage by the rim of the left fore wheel coming off, which we repaired under peculiar circumstances. We came soon to County Touro, Rhineland, and met a party of emigrants. We passed Snipe Lake, and perceived a horse threshing-mill treading the corn under foot, according to the Eastern custom. We met the Governor of the Mennonites driving out. A large windmill made of wood was in one of the villages. Ultimately we came to Nyonloch, and dined in a Mennonite cottage. Everything was very clean and tidy. Sunflowers were cultivated in the gardens, as were also poppies.

We came next to Grangehall, ultimately to the River Moraye, and saw Smuggler's Point, Dakota, not far off. Finally we crossed the Red River, and entered the thriving little city of Emerson. The city of Emerson contains about 1,500 inhabitants, and it appears to be a place where a good business is done. The mud is not quite so bad as that of Winnipeg, but it is bad enough.

On Monday I returned to Winnipeg. The streets by this time had dried up, but the ruts made driving very unpleasant.

The following are the prices of certain articles at Winnipeg: Breaking plough, 25 to 29 dollars; common plough, 16 to 22 dollars; reaper and mower combined, 200 dollars; horse hay-raker, 35 to 45 dollars; waggons, 95 dollars; spades, 1 dollar; shovels, 1 dollar 25 cents; hay-forks, 75 cents; manure forks, 1 dollar; harrows, 15 to 35 dollars; two hoop pails, 25 cents; three hoop pails, 30 cents; 16 in. tubs, 90 cents; blankets, 3 dollars; wood, 20 to 40 dollars per 1,000 feet; dressed wood, 30 to 60 dollars; shingles, 6 dollars per 1,000; lathes, 5 dollars per 1,000; nails, 5 dollars per 100 lb.; doors, 2½ dollars; sashes, 1 dollar per pair; single harness, 20 dollars; double, 35 dollars; hay, 7 to 12 dollars per ton.

The population of Winnipeg is from 8,000 to 10,000, and that of the Province of Manitoba is said to be 100,000. The Indians are supposed to number about 4,000. There are about 13,000 half-breeds, who are a mixture of English and Indian, Scotch and Indian, and Irish and Indian. The Mennonites are Russian, and number about 7,000. There are about 18,500 French in the province.

The Province of Manitoba is in latitude 49° 0′ to 50° 2′ north. It contains 9,000,000 acres, and is divided into four counties—Selkirk, Provencher, Lisgar, and Marquette (and these into twenty-four districts), each of which returns a member to the Dominion Parliament. The land in the province is divided into ten strips.

1,400,000 acres of land are reserved for the Indian half-breeds and 512,000 acres for the Mennonites. The sections throughout the province belonging to the Hudson Bay and school districts are likewise reserved. There are also Indian reserves.

Unless the land held by speculation is thrown open the tide of emigration must flow westward; so that until the country is opened by railways, its future prosperity must undoubtedly be greatly retarded. The wild animals of Manitoba are deer; bears, brown and black; prairie wolves, not formidable to man, but destructive to sheep; foxes, badgers, skunks, gofers, and the common grass snake. Grasshoppers and frogs. Locusts were very destructive some years ago, but they have not re-appeared. It is noticeable that all wild animals fall back with the advent of the white man. Buffalo bones are common on the prairie, but no buffaloes. Although I went through what was last year a bear country, not a bear was visible this year. The mosquitoes and other fly pests become less venomous as agriculture advances. As for fowl, there are ducks, bittern, prairie chickens, and partridge; and of birds of prey, hawks of great size; also several others whose names I did not ascertain. The prairie does not look like a solitude; there is always plenty of life moving about. The grass reminds one forcibly of fields of waving rye-grass. Trees are found along the course of streams. In some parts they have to drag wood a distance of twelve miles. Compressed straw and manure is used for fuel by the Mennonites, though wood is not far distant from their settlements.

Bad land is easily known from the smoothness of the surface, the sort of bluish-green of the grass, and the very sickly hue of the thin vegetation. There is no alkali where timber grows. The wolf-willow, a sort of scrub, grows on good land. Moles or gofers show hills which, if of black clay or loam, without grey or white clay or gravel, indicate good land. When light clay or gravel is turned up, the land is not desirable.

The best time to look at land is in July, August, or September, when the grass shows it. If one goes in March he is in danger of his animals being starved. If he goes in June the roads are impassable, and he is liable to be stuck up. A farmer going can travel better and cheaper by purchasing his horse and buggy and afterwards selling or keeping them. After selecting his land he has to secure it at a land office. Then he has to purchase material for a house and to build it; then to break up his land. He has then to go back for his family. One way or another, he will be put to immense inconveniences and considerable expense before he can settle down.

I returned to Ontario *vid* Sarnia, by the steamer *Quebec*, Capt. Anderson, and visited Captain Morrison's farms in Corunna, being afterwards driven by him over the township. On his farm the red clover grew naturally. His apples were the golden russet, the pear apple, the snow apple, the strawberry apple, Rhode Island greening, northern spy, Newton pippen, etc. The wheat-straw was put up in stacks for winter-feeding. The cattle came round it and helped themselves. A young bull came to us tossing his head. 'Ah,' said the captain, 'he is missing his salt.' All the cattle get an allowance of salt. He had splendid timothy hay stored up in his barn. He showed me a stump extractor. His farm evinced that he was an energetic and successful cultivator of the soil. A sailor till four years ago, he is by no means the worst farmer on the St. Clair. His lands are well fenced, his fields are levelled, and he is now underdraining the soil. The water used on his land is from the river. It is allowed to be less tinged with alkali than any water in Canada. Since his return from Prince Arthur's Landing on Lake Superior, he started underground draining.

'The weather at Corunna,' said Captain Morrison, 'is a bluster of snow in March, which soon disappears. In April the frost gets out of the ground, and he ploughs about the 10th. May is fine weather; puts in balance of seeds, and on to 20th June, and then there is rain. July is the corn harvest for fall wheat; August, the general harvest. September, sow fall wheat,

October, fine month. November, broken Scotch weather. December, frost stops the plough. January, winter; snow 1 foot. February, partly snow; cold.'

He told me that there were several farms in his neighbourhood for sale. He also told me of a farm belonging to his father that he would wish sold. It is in the township of Finch, Stormont, Ontario. I met at Sarnia several parties acquainted with people at home.

On returning to the township of Aldborough I made further inquiries as to returns. Mr. Stalker's returns of wheat averaged 20 bushels per acre; oats, 60; potatoes, 20 returns per bushel; barley, 160 bushels from 12 bushels; but this was not good, the season being very unfavourable. During my absence they had had a very wet harvest. He was wintering 15 three-year-old steers feeding with chopped stuff, peas and oats. Peas not doing so well with the bug; he uses Dr. Taché's antidote. They put all the manure they can spare on the wheat land, sow it with wheat and timothy and clover seed (5 lb. timothy and 5 lb. clover to each acre). The average price of a three-year-old steer is 40 dollars, or £6. Visited Hector McPherson, Iona, from Rhunahoaran; Duncan McLean, West Aldborough. He thrashed 600 bushels of wheat from 21 acres, sown with 1¾ bushel seed per acre; 40 to 50 bushels oats from 2 bushels sowing; 30 bushels barley per acre. Has 116 acres; 90 under cultivation. Taxes, 25 dollars. His rotation is wheat sown in fall, and clover among the braird in spring. Cuts it in July. Sometimes has a second cut of clover for seed. Next year he lets the clover grow up and ploughs it under, and then gives fair crop of wheat again. The townships here are ten miles long by ten miles broad. Mr. Dyke, in this township, sowed 12 acres wheat, and thrashed 277 bushels. Raised 50 to 60 bushels Indian corn per acre. Grazing is from 2 to 3 acres per cow. Good hay, 2 tons per acre; light crop, 1½ ton per acre. Turnips do not grow well in hard clay. I saw many other Kintyre people—Mr. Ramsay, Mr. Stewart, and visited a cheese manufactory owned by James McLean.

I went to Lorne or Bismarck, where I met with Mr. A. Kerr, from Kilmory, Lochgilphead. Left in 1818. Was in the woods all his life. His wheat averages 20 bushels per acre, weight over 60 lb.; barley, 30 bushels per acre, weight 48 lb. He stated that 12 acres grazed five cows for him all summer. A good cow should make 35 dollars out of cheese; has cows that exceed that. Leicester sheep require great care; South Downs are best.

I met with a German gentleman, J. C. Schleihauf, who gave me information as to shingles, flooring, etc.: The former, 2 dollars 25 cents. per 1,000; the latter, 4 inches to 6 inches, 18 to 20 dollars per 1,000 feet. 1,000 shingles cover 100 square feet. Bricks worth about 5 dollars per 1,000; drain-tiles, 2½ inches, 9 dollars per 1,000; 3 inches, 11 dollars; 4 inches, 12 dollars; length, 12 inches. Land can be bought here from 20 to 30 dollars per acre.

I visited St. Thomas; took rail for Dunkeld, County Bruce, Ontario. Saw splendid land on the line from London City to Harrisburgh. Passed Guelph. The land here seemed to be gravelly clay with loam above. Arrived at Dunkeld station late. Proceeded to Southampton, on Lake Huron. This country is not very prepossessing. Drove from Southampton to Owen Sound, passing the Dageen River, Chippewa Hill, and an Indian reserve of 12,000 acres. The soil is light and sandy. A good deal of bark is made from the hemlock-tree for tanning; sells at 4 dollars per cord—that is, $8 \times 4 \times 4$. Cedar is used for paving.

Passed the Sangeen River. Mr. Vandrick, who owns horses and buggies for hiring, states that he sold horses at 112 dollars each for Duluth. The expenses to the purchaser were 20 dollars for duty and 8 dollars for freight.

There is a settlement at the Lake Shore of Lowland Scotch, who go in for feeding. They pay high prices for bulls, have good cattle, and exhibited steers at Philadelphia.

We passed through the township of Keppel. We skirted along the Pottawatamie Falls. By-and-by we approached Owen Sound. There is an immense ledge of limestone in its vicinity. The town itself is beautiful compared to other towns which I had occasion to visit. There is a market in Owen Sound daily. The price of wheat here is 95 cents per bushel.

Donald McKay, 4, Concession, Sydenham, mentioned that fall wheat averaged 30 bushels per acre, but this is from land of which one-third is covered with stumps. When stumps are removed, such land yields 40 to 45 bushels per acre. He considers this the best wheat-producing district in Canada. The drawback here is that, having commenced poor, settlers were obliged to take crop after crop off the land till it was cleared. Now that they are getting up in the world, they intend to give it rest and to summer-fallow it, and by this means believe its fertility will be increased. Oats yield from 40 to 50 bushels per acre; barley, 45 to 50. Turnips grow to a very great size. Grow apples 13 inches in circumference.

A Mr. McLean, from a second year's crop of wheat, produced 100 bushels from 2½ acres, as stated to me; that is equal to 40 bushels per acre. The price of cattle and horses corroborates the price already given elsewhere, and the same for other produce. Average yield of hay, 1 to 1½ ton per acre. White clover is natural to the soil.

The average number of cows kept in a 100-acre farm is five, with their followers. I saw here Malcolm Gardener, from Margmonagach, Kintyre, and a brother. I also saw Francis McNeale, from Crubasdale Shore; Hugh McDonald, a native of Islay, and others. I passed five farms belonging to Islay men from Port Ellen. The following is the system adopted by some. After

breaking up a field it will fetch five good crops of wheat in succession, or it may be worked after this fashion :

1st year, sow it in fall with wheat.
2nd year, oats, or spring wheat.
3rd year, another spring wheat crop.
4th year, another spring wheat crop.
5th year, a crop of peas.
6th year, fit for spring or fall wheat.
Put manure on pea or oat ground, and sow wheat.
7th. After that crop, summer-fallow and seed down with timothy and clover. Let that lie four years, cutting grass annually. Pasture two or three years, and it is considered again fit for another crop.

In this township, as in other townships, every man does what he considers right in his own eyes. The great trouble they have is the limestone boulders—a good fault, for limestone rock gives a good true soil. I thereafter drove through Holland township, which is twenty-eight years settled, and, like the other, is a beautiful country. English, Irish, and Scotch settlers. Country a forest thirty years ago—infested with bears and wolves.

Came to Chatsworth station; visited the fair; cattle not good, but market very good. Went by train from Chatsworth to Toronto. On this line, the narrowest in Canada, our train went slowly—about twelve miles an hour. Our passengers were drovers. The train stopped suddenly. 'What's up? Only poking the cattle.' 'Get up, get up, get up, will ye? Get up!' Drovers were on the line poking the cattle with sticks to make them rise up. After the poking the train goes on again. By-and-by a frantic rush is made to the windows, and thereafter to the bell-rope to stop the train, and we learn that five of the cattle had leaped out! By-and-by, after a drive of many hours through a poor country, enlivened by many incidents, such as a Scotch terrier racing us, and barking furiously, night comes on, and we ultimately alight at Toronto.

Next day I went to Hamilton to attend the exhibition, but Canadian exhibitions are not like exhibitions in this country. The cattle were not forward, and, although the exhibition was partly open, it had not been formally opened by his Excellency the Governor-General, and would not be for a couple of days.

The land in the neighbourhood of Hamilton needs no description. It is, according to the people of that quarter, the garden of Canada. But the most of Canada is a garden. The orchards in this region are extraordinary. Clover cut first in June is now (September) cut again for seed. I can easily fancy what a beautiful country this must appear in spring, when the apples and peaches are in blossom. It is literally a paradise. The soil in this district is a deep red. I left Hamilton for a trip to Niagara. The soil becomes of a lighter colour, but the fine vegetable mould remains. The fields show what splendid crops were produced. More orchards, more reclaimed bush—brick and stone houses. It was a relief to see a stone house. Indian-corn extensively grown. Magnificent orchards. It is hopeless to describe the land; it was one panoramic view of sylvan and rural beauty.

We passed the Jordan. I came out at St. Catherines, and drove to Clifton, and visited the Falls of Niagara. The land in this neighbourhood is limestone.

The falls and the banks of the river are subjects for scientists, and would require a very lengthy description. They are valuable geologically, and every stranger should visit them. Having returned to Hamilton, I went to the Exhibition, which was to be officially opened next day. Among the exhibits were turnips of various species, cabbages, savoys, parsnips, beet, squashes, cayenne pods, pumpkins, mangels, potatoes, a fine collection of wheats (spring and winter) from the Government experiment farm, Ontario. The Toronto cordbinder. Thrashers (37 cwt.) and engine (50 cwt.). Prairie Queen ploughs. No cattle forward except a contingent of Hereford and Ayrshires, and a shorthorn steer and one cow. I could not lose another day, in case it might cause me to lose a week ultimately, and therefore, to my great regret, left before the Governor-General arrived.

I then went to Ottawa, and returned by the Grand Trunk to Montreal. The quality of the land along this route, on the whole, is good, though I found that fall wheat, equal in quantity to that of the west, was not raised in it. I called on my townsman, Principal McEachran of the Veterinary College, and was very kindly received by him and by his brother, Dr. McEachran, who drove me far into the country, and showed me all objects of interest around Montreal. I was also kindly entertained by Mr. Drysdale, Mr. McNish, and Mr. Alex. Milloy. On the Monday, I started for the Eastern Townships, going over the Victoria Bridge, which is tubular.

Before going to the Eastern Townships I should remark that, in the bush in Canada the best land is generally found where deciduous trees most abound. The pine grows on sandy ridges and swamps; on sandy ridges it is of regular growth, on swampy land it occurs here and there. As a general rule, deciduous trees, such as maple, beech, oak, etc., indicate good land.

The drive through the French country was delightful. It is a beautiful country, and the farms are better cultivated than those on the line from Quebec. The system of fencing with straight rails is now introduced, and the zigzag Ontario rails cease. We pass the river Belœil. The river may be about 200 yards wide, and was of a sky-blue colour, like Lake Superior. We next approached a place called the Mountain, which is wooded to the base of a perpendicular

precipice which was lost in fog. The autumnal foliage is rich, abounding in green, purple, yellow, and brown.

The roofs of the churches are of tin, and the spires are also lined with that metal. The effect when the sun shines must be dazzling. The country consists of panoramic views of rare beauty. In the fields, the ridges are not particularly straight—I believe designedly crooked. I have noticed the same phenomena in County Galway, Ireland, and in outfield lands in our own Highlands. I also observed that groves of poplar, which is a sacred wood in Catholic countries, abound in the French country. At length we arrive at Durham. Alder bushes are now seen. These bushes do not grow in Upper Canada, and here do not become trees, as at home. Ultimately we came to the St. Francis River. The scenery here is gorgeous. Painting itself would fail to represent the loveliness of the foliage. A picture such as this would be condemned as unnatural. We pass Richmond, Mr. McKenzie's farm, from Loch Broom; also Mr. Steel's farm. Underground draining is done here. We come to Windsor, where there is a paper-mill. The salmon ascend fifty miles above Windsor. The variegated foliage of the forest is lovely. I never beheld anything more beautiful. Mounds of earth are clad with trees painted in exquisite colours, as Nature only can mix them. Farmhouses and lovely white cottages with green blinds add variety, while the broad river, like a huge snake, coils its way around the base of mountains full of colour. A graveyard on the opposite side reminds the observer that, notwithstanding the beautiful surroundings, man is mortal.

We pass saw-mills, and see whole logs drawn up by machinery in order to be sawn. The river is blocked with rafts.

We arrive at Sherbrooke. My first visit was to Mr. Buchanan, township of Bury—140 acre farm. 'When a field is broken up,' said he, 'oats or barley are put in. Wheat sometimes does well, and in some places better than either oats or barley. Next year potatoes manured, next year wheat, and seed it down with timothy grass and northern clover, sometimes Alsike. White clover is natural to the soil. In poor land the ground is manured for second-year crop. It is allowed to lie in pasture till its turn comes round.' When Mr. Buchanan came here six years ago the land was run out. The heaviest crop was a half-ton of hay per acre. He manured the land for two years and cropped it, and laid it out to grass, and first year cut 1½ ton to the acre; the second year 2 ton (part being manured and part not) per acre. In some farms this quantity is taken twice in the same year.

Returns—Wheat, 25 bushels per acre	60 lb.	per bushel.
Barley, 30 to 40 bushels per acre	48	"
Oats, 30 to 50 bushels per acre (known to be 60) . .	32	"

The oats are small long oats. Pease, raise them among oats—two-thirds of oats, and one-third of pease. Beans good. Turnips do exceedingly well, but there is too much work in weeding them. Wheat, 1 dollar per bushel. Other cereals as in Ontario and Manitoba. Buckwheat, Mr. Buchanan said, does well. The more rain it gets the better it will be. It produces 50 to 75 bushels per acre. He sows 4 bushels of oats per acre; wheat, 1½ bushel; barley, 2 bushels; buckwheat, 1 bushel. Indian corn requires more manure in Bury than turnips. 100 loads of manure will produce 100 bushels of Indian corn. Cattle sell 3 to 6 cents live weight. Horses, 100 dollars for good junk (15 to 16 hands); cheese, 12 cents; butter, 30 cents; yearling, 10 dollars; two-year-old, 20 dollars. 1½ acre pasture per cow sufficient; has 5 milk cows and their followers.

Henry Cowan, Gould, Lengwick, stated his returns of

Wheat to be 20 to 25 bushels per acre
Oats, 30 to 40 " "
Barley, 15 to 20 off old, 25 to 30 off new land.

Sold four steers at 27½ dollars each, two and a half years old: bought some of these in the fall at 9 dollars; hay, 6 dollars to 8 dollars per ton; butter, 18 to 25 cents; beef cattle, 5 cents per lb.; store cattle, 3 cents.

Mr. Cowan remarked that this was a very dry season; had resided in Lingwick forty-four years and never saw the water so low.

Ontario, on the other hand, had a very wet harvest, and Manitoba was showery—exceptional circumstances in both provinces.

Mr. William Buchanan's farm:

Made 900 lb. of sugar out of 500 buckets of maple juice. Made 1,600 lb. weight of sugar in the season, which sold at 8 dollars per 100. Was shown the maple trees and the apparatus. Visited Mr. Robert French's farm. He is into the thorough-bred business, and doing well.

Visited the meadows, which produce three tons of hay per acre.

Next day saw a well-manured grass field belonging to Lewis McIver, which also yielded three tons of hay per acre.

Arrived at Compton and drove to the Hon. Mr. Cochrane's farm. Was shown his splendid Durham stock—amongst these the 10th Duchess of Airdrie and three of her progeny, viz., 2 cows and a heifer; 10 to 12 calves from the Duke of Oxford and Marquis of Hillhurst. Saw a thorough-bred white cow—fat—shown at the Dominion Exhibition, Montreal, and which obtained first prize. Shown also a two-year-old imported Ayrshire bull, a very fine animal; also the Duke of Oxford, a very famous Durham. The Duchess of Airdrie is twelve years old, and her descendants have realised to Mr. Cochrane £30,300, being unprecedented in bovine history. Was also shown other cows, all of excellent quality, kept for feeding the thorough-bred calves. Mr. Cochrane does not pamper the Duchess, but keeps her in ordinary condition. He received a friend who accompanied me, and myself, very kindly. Saw a splendid turnip field on his farm. His farms are in the highest order of cultivation, and show what that soil is capable of producing when farmed scientifically. His land was of less intrinsic value originally than other lands in the neighbouring townships, but to the observer it would appear now to be vastly superior to any in the district. Of course his success is inducing others to follow his example. There are no collections of field stones studded in heaps over his fields, as may be seen everywhere in the Province of Quebec, and also in the townships about Owen Sound, Ontario, and elsewhere. They are put into substantial stone fences.

There is a plant in the district called the wild schumac, which causes the hands and face to swell if touched. The wild ivy also affects some people even if they come within the wind of it. It is found in Quebec, Ontario, and Manitoba, and also in the States.

I visited at Sherbrooke the Paton Woollen Mills, having received a note of introduction to Mr. Paton from the Hon. Mr. Pope, Minister of Agriculture. These mills are very large. The washing and cleaning machine disposes of 4,000 lb. of Canadian wool per 10 hours, or from 2,000 to 4,000 lb. of fine wool. Saw the dyeing vats, the burr-picking machine, 20 sets of carding machines, 24 spinning mules, each having 336 spindles; 135 looms producing last week 711 pieces of cloth, each 25 yards long; the hydraulic press, the patterns, and the machine shop. The work employs from 500 to 550 hands. It is the largest in the Dominion, and the machinery is of the latest and most approved invention.

Visited the annual exhibition or fair. The best cattle are now sent off to Britain, and consequently the fair-exhibits suffer.

I next went to Richmond, and visited the College of Agriculture, being very kindly received by Principal Ewing. He informed me that wheat with him averaged from 20 to 25 bushels per acre; barley, 30 bushels. Oats is generally a sure crop—35 bushels to the acre.

He grounded his students well in arithmetic, algebra, Euclid, and land-surveying.

On the 2nd of October I went to see the Quarantine Depôt at Point Levi, which contained many excellent cattle newly arrived from England. I thereafter started for St. John, New Brunswick. In this journey I passed over a great extent of French country, beautiful landscapes, seeing various glimpses of the bays and havens on the St. Lawrence, and once more beholding ocean's shipping. The most prominent feature in the Lower Canadian towns and villages is the churches, which are of immense size generally, and the contrast between these huge piles and the small dwellings is very marked. In the course of time we entered New Brunswick.

This province is divided into eight counties and fifty-nine parishes. The Bay of Chaleur forms its north-western boundary, at the head of which lies Campbeltown. Very little farming is done there. It is famous for salmon-fishing, though that industry was not very successful last year.

The salmon go up the rivers Restigouche and Matapedia. There is a salmon-breeding establishment which turns out three-fourths of a million of young fish yearly. The young fish, when fit for removing, are taken to other rivers along the Bay of Chaleurs. The salmon is caught by stake-nets on the sea-coast, and on the rivers by fly. Salmon is very extensively exported. A fisherman with a 300-fathom stake net averages 1,500 dollars value of fish during the season.

The specified distance between each stand of nets is 200 fathoms, but this is not always rigorously enforced. Fishing begins 24th May, and ends with the last week of July.

There is a good system of schools in New Brunswick. Education free. Personal property is taxed, and every man from twenty-one to sixty pays 1 dollar poll-tax.

The river St. John is navigable for trading vessels of say fifty tons burden, and small steamers, for about fifty miles of its course. Smaller craft can get up 150 miles. Among the fish are salmon and sturgeon. The banks are fertilised by the overflowings of the river, leaving alluvial deposits which manure and enrich the grass.

I ultimately arrived at St. John, which I made my head-quarters in New Brunswick. I thereafter returned to Sussex Valley. The soil along the railway from St. John to Rothesay is vegetable mould on a sandy and gravelly subsoil. The rail skirts along the estuary of St. John River, which is wooded and has precipitous, bold cliffs. The scenery is very beautiful. Rothesay to Quinspansia is hilly. There are good farms along the line. The soil from Quinspansia to Nawigewa is reddish. Dyke land, excellent for hay, occurs along the River St. John. From Nawigewa to Hampton there is beautiful green pasture, and much dyke land. Width of

river here approaches West Loch Tarbert. The country is beautiful and has a rich appearance. Soil, as turned over by the plough, is becoming, as we travel along, of a lighter red.

Passed Norton Station. The river-banks present splendid grazing. Passed Apohagui; then some Indian wigwams covered with beech-bark.

Arrived at Sussex, and called, 4th October, on Mr. George A. Dobson. He showed me exceedingly good mangel-wurzel. He stated that his wheat produced 25 bushels to the acre (spring wheat); oats, 45. Takes five crops in succession off his hay-ground. Potatoes, he planted 4 barrels, and dug 104 barrels. The prolifics were the kind, but they rot more than the others. The red safes have a red streak when cut, are latish, but very good. Has silver dollars, a white potato. Had two oxen (Durhams); would weigh when fat, live weight, 3,800 lb. He fed and sold off 33 head of fat cattle last season.

His statement of the weather was that snow falls in December to a depth of two feet, and lasts till March. January and February are the coldest months; hardly any rain in winter months. In March snow begins to decrease. April is rainy. Half of May to half of June is occupied in sowing and planting. May is mild; June, very hot; July, hot, little rain, thunder generally; August, hot, also thunder; September, dry, with occasional showers.

Visited John Graham, from Girvan, at the cheese factory. He conducted the first factory in the province; makes from 25 to 26 tons per season. He mentioned that he knew of many farms for sale. Land has not been so cheap these thirty years, he said, as at present. He sowed 7 bushels of wheat, and thrashed 103, being 29 bushels per acre fully. Last year he had 33½ bushels from 1¾ bushel sown, the extent of ground consisting of hardly an acre. Weevil used to be bad, but is not so now.

Oats average 45 bushels, and are sown 1st June, thrashed 2nd September.

Potatoes: Considers New Brunswick the best country he ever saw for potatoes—has generally 20 to 26 returns.

Labour is from 60 to 70 dollars per six months—that is, £12 to £14; 14, 16, and 20 dollars per month for haying. Girls, 5 to 6 dollars per month. Milk, 2 to 3 cents; butter, 18 to 20 cents; beef and mutton, 6 to 7 cents; pork, 4 to 6 cents. On 500 dollars *ad valorem* a tax of 1 dollar 80 cents is payable, and 1 dollar 25 cents for school. They have to give three days' statute-labour on the roads, or pay 50 cents per day. Ministers are supported by voluntary contribution.

Schools: No house to be more than 2½ miles from a school. A house is seldom more than three miles distant from a church.

Sussex Valley is a good district for Indian corn, squashes, melons, pumpkins, etc. I thereafter drove past Mr. Nelson Oinald's farm. Mr. Charles Haison's—a farmer who goes in for vegetables, carrots, and strawberries, sending them into St. John; he also grows plums, currants, and gooseberries. Mr. Hugh McMonikale breeds horses—from thirty to forty thorough-breds—and has fenced in parks for training them. Passed many farms, all of excellent quality, with splendid orchards attached.

The nature of the soil in this district, as seen from a well in process of being dug, is loam on top two feet thick, gravel two feet, red clay and gravel mixed all down to ten or twelve feet, where water is got.

The forest trees are the pine, tamarac, spruce, birch, alder, cedar, maple, balsam, and birch. Wild animals are the cat, bear, moose-deer, and cariboo. The latter are generally twenty miles back in the forest. Calving cows can be purchased at from £5 to £6; yearlings, 12 to 15 dollars; two-year-olds, 20 dollars. The Permissive Act is in force in King's County.

We drove into a different township, and passed through many fine farms. The following is the rotation practised by some farmers. A field in pasture, on being broken up, is sown with buckwheat. Next year half in oats and half in potatoes; next year, put potatoes in where oats of last year were; and oats seeded down in potato ground of the preceding year; next year, oats and seeding down. Take hay crop off for three years; pasture for a number of years according to extent of ground.

Mr. Nelson Coates, whose farm I did not visit, stated that his wheat would average 25 bushels, and his oats 35 bushels per acre. He has a 330 acre farm, 160 of which are in cultivation. Cuts 100 tons of hay annually. Winters 60 head of horned cattle. The pasture gives 2 acres per cow taken all through, but in certain parts one acre would graze a cow well. Labour, 100 to 120 dollars for a man per annum; 60 to 70 dollars for six months. Has 22 milk cows.

From a dealer I learned that South Downs and Leicester sheep are the breeds generally in this province, weighing as a rule about 80 lb. They are wintered on hay and grain, and can be purchased at from 5 to 6 dollars, or £1 to £1 4s. Freight to Liverpool, 1 dollar 30 cents from Rimouski on the St. Lawrence. He stated cattle freight to be 14 dollars.

The Sussex Valley is uncommonly fertile, and farms are said to be easily purchased. The city of St. John contains 32,000 inhabitants, and has a considerable trade. I was present at the opening of the Provincial Exhibition. The display of agricultural produce was very good indeed. It is situated on the Bay of Fundy, where the tide rises some thirty feet. The fish around the coast of the province consists of salmon, herring, gasparouche, shad, haddock, pollock, lobster, and

halibut, sturgeon abound in the rivers. This province is bounded on the north by the province of Quebec and the Bay of Chaleur; on the east by the Gulf of St. Lawrence; on the west by the State of Maine; and on the south by the Bay of Fundy.

Having crossed from St. John by steamer to Annapolis, I entered another very fine Province, that of Nova Scotia. This province is bounded on the north by the Bay of Fundy and Chignecto, and is separated from Prince Edward Island by Northumberland Strait. The Gut of Canso separates it from Cape Breton; otherwise, except at Amherst, where it is connected with New Brunswick by an isthmus about twelve miles long, it is altogether surrounded by the Atlantic Ocean. The length of this province is 260 miles; its greatest breadth, 100; its area, 16,500 square miles. Cape Breton, attached to it, is 110 miles long by 90 broad. The population in 1871 was 387,000. The Catholics and Presbyterians are about equally divided, being about 103,000 each. Other denominations number about 181,000. There are fourteen counties in Nova Scotia and four in Cape Breton. Nova Scotia is an undulating country, consisting of hills, plains, and mountain ranges. The ridges run along the entire country, throwing streams to the north and south. These ridges terminate in bold upright headlands on the coast, and sometimes graduate into verdant plains. Between the North Mountain, along the Bay of Fundy, from Digby to Cape Blomidon, and the South Mountain in Annapolis and King's Counties, is a beautiful valley, which was part of the subject of my visit.

The soil throughout the province is varied, the inferior being found along the southern shores. The best soil is on the northern. The counties along the Bay of Fundy contain much dyke land—that is, land that was enclosed from the rivers by the early French colonists, by means of earthen dykes. It is exceedingly fertile, having, without manure, produced splendid hay crops for the last 150 years.

The winter sets in about the 1st of December, when snow falls from one to two feet deep. January, the frost is pretty severe. February, 20° to 24° below zero. Thermometer never freezes. March is wintry, blustery weather, rain and snow.

Snow leaves about the last week of April and the first week of May. Then ploughing and sowing are in full operation, and continues to the 10th of June. Potatoes and buckwheat are in by the 1st of June. In the last week of July and first week of August, hay is cut. Harvest commences about the 20th August, and all through September. Spring wheat is out in September.

The steamer, on her way to Annapolis, touched at Digby, a considerable town. I was impressed during the sail up the Annapolis Gut by the appearance of well-to-do farms and rich dyke meadow land, comfortable houses, with orchards. I was not prepared for what was still to be seen. I went by rail from Annapolis to Bridgetown. I visited the Paradise Cheese Factory. They there can manufacture 15 cheeses per day of from 20 lb. to 80 lb. weight. The factory is a joint-stock company composed of farmers in the district. They send in their milk, and the proceeds, after deducting expenses, are divided amongst the partners. They manufacture sweet-milk cheese from 10th May to 10th October. Skim-milk cheese runs a fortnight. This season they made 1,250 cheeses, the weight being 27 tons. 300 cows are about the number that supply milk. The profits allow about 1 cent. per lb. of milk. Two hands are employed in the factory, and five teams. The cheese is sold in the local markets of St. John, Halifax, and Yarmouth. They manufacture the cheese on the principle invented by Jesse Williams, the first cheese-maker in the United States. The average price for cheese is 12 cents. 35 head of swine are fed with the whey. The following are the factories in operation in Nova Scotia: 4 in Pictou County, 1 in Cape Breton, 1 in Hants, 2 in Colchester, 5 in King's County, 8 in Annapolis, and 1 in Yarmouth.

Mr. Betton, Paradise, says that wheat averages 23 bushels; oats, 25 bushels; barley, 23 bushels per acre. Potatoes are not good with him; they average 200 bushels per acre. Mangel wurzel, 500 bushels. Hay, 2 tons per acre. The best land in the county for hay is the dyke-land. His farm is 101 acres. He goes in for raising oxen. Raises three calves a year. Sells a yoke each year; price, 8 dollars per 100 lb. The pair weigh together 1,400 lb. dead weight; live weight would be 2,800 lb. Farm labourers get 12 dollars (£3) per month for ordinary work. One dollar per day for haying, and $\frac{3}{4}$ of a dollar for harvesting. Servant girls, 4 dollars per month. Many of the girls go to the States. The county of Annapolis will produce 150,000 barrels of apples, at 1 dollar 25 cents per barrel; and judging from the number of voters in the county, and that the half of them are farmers who, as a rule, sell two oxen each annually, there may be 3,000 oxen exported yearly for the English and Scotch markets from Annapolis county alone.

I drove into the country, up one road and down another, and was charmed with the farms and general appearance of prosperity. Notwithstanding all this, I was informed not only in Nova Scotia, but also in New Brunswick, and in the Quebec and Ontario Provinces, that many farms are heavily mortgaged, which means that heavy interest is payable for money advanced to their owners, and that their owners are only too anxious to sell off their farms so as to be able to clear their debts; so that there is a gnawing worm at the root of every tree, however promising it may be externally. The farms consist of mountain land, upland, and interval land. Bridgetown, fourteen miles from Annapolis, is at the head of the navigation of the

river, and is the largest town in Annapolis County. I saw a vessel here of from 159 to 200 tons burden, that would draw probably from eight to ten feet when loaded.

The cry everywhere I went in Nova Scotia was, 'We want good agriculturists.' Bridgetown would afford employment to many artisans: a grist-mill is much wanted, so is a woollen-mill, and a steam saw-mill.

Having left Bridgetown and its beautiful fruits, I proceeded to Kentville, which is environed by hills. I here experienced the greatest hospitality from a fellow-countryman, Mr. Innes, manager of the Annapolis and Windsor Railway, not only in driving me over the country, but in explaining the nature of the district, and afterwards entertaining and lodging me.

We called on Mr. Leander Rand, township of Canning, near Kentville, whose wheat averages 22 bushels per acre; oats, 45 to 50 bushels; Indian corn, 40 bushels shelled; potatoes, 225 bushels. Manure is spread broadcast. Hay gives 2½ tons per acre fully; turnips, 1,000 bushels per acre. There is any amount of sugar maple in the district, but it is not turned to account. Mr. Rand has fourteen or fifteen acres in a solid block—'big fellows, as big as a barrel.' He has thirty-three head of cattle, and his farm is one of 200 acres. The grazing is at the ratio of six cows to eight acres. Labour is 50 cents per day for a lad; for an ordinary workman, 1 dollar per day; and 120 dollars per annum for a man in the house; for a married man, 140 dollars with a house, and keep himself; maid-servant, 4 dollars per month. Average number of trees in an orchard of two acres is 110. He has got 226 barrels off forty-two trees, and sold 100 barrels at 2 dollars. Thrashing is done by steam thrasher; give every twelfth bushel in return. He usually ploughs seven inches deep; most people only plough five inches. Butter is from 18 to 20 cents; cheese, 12 cents. A milk cow should produce in milk 30 dollars, or £6; one cow he had produced 360½ lb. of milk in a week, but the average of his other cows was 180¼ lb. Working horses about fifteen hands high are worth 100 dollars; working oxen, 80 to 100 dollars per pair. Clydesdale horses are too heavy for that district, and trotting horses too light. The cattle they want are polled Angus; and the horses, the Norman breed.

Mr. Innes estimated the fruit-production of Annapolis, King's, and Hants Counties at 250,000 barrels of apples.

We called on Mr. J. W. Margieson. His wheat averages 27 bushels per acre; oats, 30; barley, none; average of potatoes, 200 bushels. He has two farms—one of 210 acres, and one of 212 acres. The latter has 40 acres of salt marsh, which is the very best for fattening cattle. Dyke-land is worth in the market £32 an acre, or 160 dollars; upland is worth 16 dollars an acre. Average price of hay is 10 dollars per ton, but he is selling it at 16 dollars per ton; upland hay is a dollar cheaper, viz., 9 dollars on an average. Marsh-mud is splendid for manure. When ordinary grass-land is manured by it, it produces easily 2 tons per acre, but on dyke-land 3 tons. Mr. Margieson states that the present time is the worst that they ever had.

Mr. Innes continued his drive with me through Cornwallis, a beautiful country, and we then returned to Kentville.

Next day I proceeded to Windsor, and the superintendent of the railway plant being on the train, he gave me very valuable information, not only as to the construction of the dykes and sluices, but also information as to other industries. We passed Cornwallis River, King's Port, Fort William, Avon River, and Grand Pré, the scene of Longfellow's poem of 'Evangeline.'

Grand Pré (or the great field) consists of about 3,000 acres of dyke-land, and is held in common by a number of proprietors. After the crops have been cut, cattle are turned on to the after-feed, or pasturage, and, according as the season has been favourable or otherwise, a greater or lesser number of cattle are allowed on the dyke-land; and a proportionate number of cattle, according to the extent of their other lands, is decided upon by the proprietors for each farmer.

We now saw Hantsport, on the other side of the Avon, and Armstrong's ship-building yard. The river here is three-quarters of a mile broad. At Avon Port, on our own side, a ship of 1,200 tons burden was on the stocks.

We passed a brook, the dividing line between Hants and King's Counties. The former is mostly kept up by ship-building. At Hantsport a 600-ton vessel was on the stocks; sail-lofts and other nautical industries were spread about. The village depends on shipping. We passed Newport Landing, mouth of St. Croix River, contiguous to Windsor, which was a mile distant.

We now passed an iron bridge 1,200 feet long, erected at a cost of £40,000, and arrived at Windsor, a thriving town of 2,500 inhabitants. This neighbourhood is rich in limestone and gypsum, much of which is exported.

By the kindness of Dr. Black, I was again driven over the country. We called on Mr. Maxner, who has a farm of 125 acres. His crop of wheat this year was exceptionally poor; it would only average 17 bushels per acre. His oats would average 35 bushels per acre; barley, only sowed half a bushel; potatoes, 200 bushels. He has 25 head of cattle; generally fattens two every year. He has 45 acres of dyke-land, and 17 or 18 under crop. He keeps 15 cows. He sells milk at Windsor, 2½ cents a lb., and gets at factory 1 cent; butter averages 20 cents. Dr. Black said that retail price of lamb was 10 cents; roast beef, 12½ cents; steak, 15 cents, at Windsor. The milch-cows are a mixture of Hereford, Durham, and Devons. A good cow

would cost from 35 to 40 dollars, and would average ten quarts per day for six months. Mr. Maxner corroborated all about dyke and upland.

Dr. Black drove me to the place where for many years the late Judge Haliburton, who wrote 'Sam Slick,' resided. Not far from his house a large gypsum quarry is being worked. I was very kindly entertained by Dr. Black, and afterwards having accidently met Dr. Fraser, Windsor, he also was exceedingly kind to me. We witnessed the tidal wave called the 'bore' coming up the river. All creatures leave the way when it approaches. The cattle know the sound of its roaring.

From Windsor I returned to Horton Landing, Grand Pré, and called on Mr. Paterson, who also received me very kindly. He likewise drove me over the country. He owns 100 acres, 30 being upland, 70 dyke-land. His wheat, he stated, averages 20 bushels per acre; oats, 40; barley, none, but 40 used to be the average. Potatoes, he had 8 acres, which produced 2,000 bushels, which he was shipping; this gives 250 bushels per acre.

He stated that he never succeeded with turnips on his land; they worked too much to leaf and stem with him. They, however, do very well with a neighbour who, on the other hand, could not raise mangels, whilst on his land he can raise 1,000 bushels per acre without trouble. Of sugar beet, he stated that he raised 200 bushels last year; but sugar beet was more difficult to cultivate than either mangels or turnips. Indian corn did fair—25 to 80 bushels per acre.

In that province they manure the ground for potatoes, spreading it on; also manure the turnip ground, and sow it in drills. He kept 10 cows last summer, and raised the calves. This summer only kept 6 cows, filled up the vacancy with oxen. He is under the impression that it is more profitable to feed than to breed. He says the dyke-land will produce 2 tons hay on an average per acre. The upland, by under-draining and manuring, will produce 3 and even sometimes 4 tons per acre, but the dyke-land will take care of itself. It has been cropped continuously for 150 years. A 14½-hand horse, about 1,000 lb., would be worth 130 dollars.

Next day I called upon various parties in Halifax; amongst others, I had the pleasure of an interview with Mr. Gossip, the president of the Geological Society of Nova Scotia. Having a day to spare, I visited the east side of the peninsula, for the purpose of passing through a portion of the mining country. On the train, I met the Hon. Mr. Holmes, and also the Hon. Mr. Pope, Minister of Marine, Ottawa. I received much information from the former as to the geology of Nova Scotia, and from the latter an invitation to visit Prince Edward Island. I was very sorry that I could not do so, as I have reason to know that the island would have richly repaid the visit. In common with Nova Scotia that island has a mud in the beds of rivers, which is a great fertiliser. It consists of oyster-shells, animal remains, and *débris* of soil washed down by the rivers. This, when applied to the land, enriches it so much that it cannot be surpassed in the Dominion.

At the Montreal Exhibition, Prince Edward Island took the first prize for white oats, the first for black oats, the second for spring wheat, and the second for barley. It also carried the first prize for draught-horses, and the second prize for shorthorns.

I come now to the peculiar excellencies of the peninsula of Nova Scotia, and that is, its vast resources in minerals. The minerals generally belong to the Government, but they are leased to parties desirous of entering into mining operations, and every facility is afforded to prospectors. Particulars can be had on application. The coal of Nova Scotia is bituminous, and consists of coking, cherry, and cannel coal. A vast coal-field, extending seaward under the Atlantic, occurs in Cape Breton; the Sydney coal-field is famous, and has been found valuable for steam coal and for gas; the Inverness coal-field is likewise well-known, and, from analysis made, would command a ready market if suitable facilities for shipping it were provided; the Pictou coal-field, south of New Glasgow, which place I visited, has an area of thirty-five miles, in which the beds are uncommonly large. It is very favourably spoken of by the manager of the Richelieu and Ontario Steam Navigation Company, who considers it equal to Scotch. It is used on the Intercolonial Railway. The Allan Line steamers also use it. The Cumberland coal is much used in St. Johns, New Brunswick. In one mine the vein is eight feet thick. Springhill is extensively worked. Between Cape Breton and Nova Scotia there are coal-beds which cover an area of 685 square miles.

In addition to coal, there is gold, which is to be found along the Atlantic coast from Canso to Yarmouth. It occurs, as is stated in the lodes, 'in spots of every shape and size, up to 60-ounce nuggets.' In this province the deposits are found at Waverley fifty feet deep. The following are the districts in which gold is known to exist: Caribou, Moose River, Fifteen-mile Stream, Gay's River, Laurencetown, Montagu, Waverley, Oldham, Sherbrooke, Isaac's Harbour, Wine Harbour, Tangier, etc., etc. For full information, see work by Mr. Edwin Gilpin, jun., A.M., F.G.S., on 'The Mines and Mineral Lands of Nova Scotia.' Amongst the information in that excellent work will be seen a return per man from the various districts, the highest being the Montagu, 6 dollars and 13 cents per day; next to it Oldham, 5 dollars and 41 cents per day.

There is also iron to be found in the province of great value; Londonderry is a well-known mining locality, and the iron here is believed to be superior to the best English iron. Iron ores are also found at Pictou. Iron is found all the way from the Gut of Canso to Yarmouth. Copper

also is found, as well as lead and silver; antimony, nickel, and tinstone are known to be in the province; also arsenic, sulphur, and manganese. It is believed that of the latter large deposits exist.

In this province also, gypsum, hard and soft, is found in great beds. Soft gypsum, as stated, is near the late Judge Haliburton's house at Windsor. It also occurs with lime when entering the railway station from the north. Soft gypsum is valuable as a mineral manure, and for plaster purposes, cornices, etc. The hard is not so much used, being more costly to work.

Besides the above, the paint trade is greatly indebted to Nova Scotia. Ochres are found at the Londonderry iron mines, and in Antigonish and Pictou counties—modifications of red and yellow being produced by other means. There are also salt springs and mineral waters, free-stone, granite, flags, slates, clay, limestone, marble, and natural cements; fire-clay for bricks and tiles; grindstones, millstones; as well as amethysts, cairngorm stone, jasper, and opals, and heliotrope or blood-stone.

In conclusion, the Province of Manitoba appears to have a more fertile soil than any one of the older provinces. In productiveness it ranks first in respect of wheat, oats, and potatoes; but I found that continuous cropping of wheat is reducing the land. Turnips and mangel wurzel do exceedingly well. The averages taken from the preceding notes are—wheat, 30½ bushels per acre; oats, 62½. Potatoes average 225 bushels per acre. As the province at present consumes all its wheat, the prices obtained are as good as those in Ontario; but when wheat is exported they will be relatively lower. The country is suitable for cattle raising. Timothy hay and Hungarian grass produce good crops; red clover has been tried, but will not stand the winter. Fuel can be obtained along the banks of the rivers, and wood lots are assigned to settlers; but unless coal or other material is substituted, wood growing must be very extensively resorted to to supply the settlers with fuel. The climate of Manitoba is healthy—the air dry, clear, and invigorating. Land can easily be protected from prairie fires, which are not unfrequent in September.

Next to Manitoba, the province of Ontario has the best cereal crops. Wheat in the district visited by me averaged 27 bushels per acre; oats, 48; barley, 55. Potatoes are not much grown, except for home consumption. Indian corn does very well. Fruits are excellent. The climate is good. There are many industries in the towns, principally connected with agriculture.

Next in order comes Sussex Valley, New Brunswick. Wheat produces on an average 26 bushels, and oats 48 bushels per acre. New Brunswick has a later spring and a later harvest, and a damper clime than Ontario. Potatoes, mangels, and turnips thrive well. Cattle feeding for the English market is being entered into. Hay land is good. The local market for most produce is St. Johns.

The Eastern Townships of Quebec produce wheat averaging 24 bushels per acre; oats, 37½; barley, 38½. The townships are good grazing lands, and cattle feeding is being gone into.

In Nova Scotia wheat averages 22 bushels per acre; oats, 25; barley, 23. It has exceedingly rich dyked marsh-lands, the river bearing down a mineral deposit, and the tides carrying up vegetable and animal particles, which together form a mud that cannot be surpassed as manure for grass-lands. Nova Scotia consumes all its own cereal produce. Its winter is longer than Ontario, but vegetation is very rapid when the heat of the summer comes on. Cattle feeding for the English market is extensively gone into. It can vie with Ontario for its apples, pears, plums, and grapes. Its industries are fishing, mining, ship-building, lumbering, commerce, and manufacturing.

In all the older provinces, that is in Ontario, Eastern Townships of Quebec, Nova Scotia, and New Brunswick, there are many farms for sale.

The houses in Sussex Valley, in New Brunswick, and in the Cornwallis, Windsor, and Annapolis districts of Nova Scotia, are very nicely got up, and in general are better than the run of Ontario houses, though in some townships and near towns these also are very good.

The price of land of course varies very much, according to its quality and the houses erected upon it; but with a good dwelling-house on the farm and the requisite stable, barn, etc., a farm of 100 acres could be easily purchased at 40 dollars per acre, and sometimes at less. In Nova Scotia marsh-land sells very high—about 160 dollars, or £32 per acre.

One can judge from the preceding account which province he would select if he were disposed to emigrate. Manitoba is far distant. The lands next the railway at the Winnipeg end are all taken up, but could be bought high from their holders. Emigrants require to go back into the country to secure the free-grant lands, but the immediate extension of the Pacific Railway, which is now under contract, will speedily open up the vast area of prairie land between Manitoba and the Rocky Mountains, a distance of not less than 900 miles.

My idea is that Canadians are better fitted for prairie life than we are; and seeing that they are not very far distant from Manitoba, families could overcome, without nearly so much inconvenience or expense, the difficulties which distances throw in the way of British farmers. I met an old Canadian, Mr. Rutherford from Oxford Co., Ontario, who was all over the Province of Manitoba looking for land. He bought an improved farm west of Calf Mountain, Pembina

Range, consisting of 320 acres, for 2,900 dollars, including 20 acres of wood with buildings. He reported that an excellent crop was on the ground. He preferred paying the above price to incurring the great expense and labour of erecting buildings and fences, and the inconvenience and expense that would otherwise be attached to his settling on unoccupied land. If Mr. Rutherford found this to be advisable in his case—and he was a man fit to judge—I think any person desirous of emigrating should consider well, whether, if he can afford it, it might not be desirable for him to give a higher price in the lower and maritime provinces for a ready-made farm, where he might have all the social comforts of life quite within his reach, than proceed westward.

Many Canadian farmers are burdened with mortgages on their farms, and they are anxious to be relieved of these farms, and to start life afresh in Manitoba, where they can get their sons around them, and be afterwards provided for. These men are accustomed to rough it, and know how to use their axes in erecting log-houses, etc., and they therefore are eminently qualified for life in Manitoba.

As to schools and churches, the Dominion is as highly favoured as we are ourselves. A school-tax is paid, but no fees.

Medical practitioners can everywhere be had in the lower provinces, and by-and-by will spread themselves over Manitoba.

I returned from Halifax by the Allan steam-ship *Hibernian*, Captain Archer. We had heavy weather, but had a good ship and a good commander; and although our passage was protracted, we passed a very pleasant time, arriving at Liverpool on the 26th October.

After the report had been read, a number of gentlemen sat down to dinner in the Argyle Arms Hotel, D. McGibbon, Esq., presiding. The usual loyal toasts having been duly honoured,

Provost Greenlees said it had fallen upon him to propose the toast of the evening. He did not know for what reason, but he supposed it was because he was a very old friend of his. All must admit that Mr. McLean had done his duty faithfully. When they considered that he had kept them for two hours and three-quarters listening to the account of his experiences in that country to which he had been sent, they would acknowledge that he was a man of no ordinary ability. In seeking a representative to send from this district the farmers could not have got a better man. He could fancy Mr. McLean going about everywhere with his note-book under his arm. He did not give them the ideas of one man only, but he compared various opinions with his own, and then arrived at the result, and he was certain that in every opinion he gave he was thoroughly honest. He asked them all to join in drinking long life and health to Mr. McLean.

The toast was drunk with enthusiasm.

Mr. McLean made a suitable reply, and, after other toasts, the company separated.

REPORT OF MR. GEORGE CURTIS,

Woodside, Silsden, Yorkshire.

'CRAVEN farmers are pretty well acquainted with the circumstances which led to the appointment of Mr. G. Curtis as their delegate to Canada to report on the suitability of that country as a field for the emigration of Craven farmers. Suffice it now, therefore, to say that five months ago, on the invitation of the Canadian Government, the farmers of this important grazing district appointed Mr. Curtis, and he accordingly went out to view the land, leaving the shores of England on board the Allan Line steamer *Sarmatian* about the middle of July. He remained in Canada a little short of three months, confining his observations chiefly to the Province of Ontario, covering in that period a tract of country about 700 miles long by 300 miles broad. Recently Mr. Curtis returned home, and last Monday met a large gathering of the Craven farmers at the Assembly Rooms adjoining the Black Horse Hotel, Skipton (Mr. John Throup). It being the fortnightly cattle-fair day, the room was crowded. On the motion of Mr. H. Holden (Halton East), seconded by Mr. W. H. Davis (Gargrave), Mr. A. Ross was called to the chair. Amongst those present were Mr. Grahame, of Glasgow, Canadian Government agent; Mr. Gomersall, Otterburn; and Mr. Shuttleworth, representative of the State of Iowa, U.S.A.

'The Chairman, in opening the proceedings, said that five months ago many of those present assembled in that room to select one out of three gentlemen nominated at a previous meeting to proceed to Canada, at the invitation of the Canadian Government, as a delegate from the Craven farmers. Mr. Curtis was selected, and to-day they had met together again to hear Mr. Curtis's report on Canada as a field for emigration. Doubts had been expressed as to whether they had done right in selecting a gentleman who had passed the meridian of life for so arduous a task. But in looking at Mr. Curtis now, and at the voluminous report which he had laid on the table, he was sure the issue had confirmed the wisdom of their choice; and he was glad to see that, mentally as well as physically, Mr. Curtis had taken no harm by his sojourn in the Western Hemisphere.'—*Craven Pioneer*, November 20, 1880.

Mr. Curtis, who received a very hearty welcome from his brother-farmers, then formally presented his report, which was a long and exhaustive one, and ably written throughout. He said:

I proceed to give an account of my stewardship, by submitting to you a report of the mission with which you entrusted me a few months ago. I went to Liverpool on the 21st of July last, and there met with Messrs. Sagar, Imrie, and Broderick, fellow-delegates. On the following day we sailed in the *Sarmatian*, a vessel of admirable build and noble proportions, under the efficient command of Captain Aird (an appropriate name for an Airdale farmer to sail under). This vessel is one of the splendid line of steamers owned by Messrs. Allan Brothers. We had a large number of emigrants and other passengers on board. We called at Moville (Ireland) for the mails, and then steamed away across the Atlantic without let or hindrance until the 28th, when we were enveloped in a dense fog. The weather became very cold, and we were close to a number of icebergs. The fog-horn was repeatedly sounded, but as that had no effect upon those mountains of ice, our speed was slackened and the engines finally stopped, to avoid a collision with one of those 'cool customers.' On the 29th we passed through the straits of Belle Isle into the Gulf, and as we steamed into the River St. Lawrence the weather was delightful. The shore on our left, near which we sailed, appeared rocky, but well timbered. Patches of wood are cleared in some places, and upon these clearings are erected houses inhabited by fishermen. They are painted white, and have the effect of brightening up an otherwise sombre scene. There is also a fine view of the Laurentian Hills, which stretch away as far as the eye can reach. Some miles before reaching Quebec, on the right-hand side of the river, we obtain a pretty view of Montmorency Waterfalls.

We arrived at Quebec on the afternoon of the 31st, where we remained until the Monday morning, the 2nd of August, and then left for Ottawa, the capital of the Dominion. In a consultation there as to our future movements, it was thought unadvisable for all to travel over the

same ground, and with a view to spread ourselves over as wide an area as we could thoroughly investigate, Messrs. Imrie and Broderick took the Province of Manitoba and Mr. Sagar and I that of Ontario. We travelled over a considerable section of country together, but there were large districts in which we separated. I shall therefore, to avoid confusion, speak only of myself, and give my personal observations, recorded daily in my note-book at the various places visited. I may here state that I was permitted the fullest liberty in the choice of localities I wished to visit, and that every information was given and facilities afforded by the Canadian Government, through Mr. Lowe, the courteous secretary of the Department of Agriculture at Ottawa; and among many others, the Hon. A. S. Hardy, Professor Buckland, Mr. D. Spence, and Mr. J. A. Donaldson, of Toronto; Mr. J. Smith, of Hamilton; Mr. A. J. Smythe, of London, as well as Mr. Stafford and Mr. Persse, of Quebec. When I arrived in Canada, the Hon. J. H. Pope, the Minister of Agriculture, was in England on a visit; but on his return I had a pleasant and protracted interview with him. I found him practically conversant with all matters pertaining to agriculture, and indeed he owns a large farm in the Eastern Townships of Quebec. The land around Quebec, as well as the province generally which bears its name, is to a large extent occupied by French Canadians. That part of the province called the Eastern Townships, said to be the Garden of Quebec, is inhabited by Scotch and English settlers; the soil is of very good quality, and well farmed, with satisfactory results. Wild lands can be bought here at from 2s. 4d. to 3s. per acre; and improved farms from 20 to 25 dollars per acre with buildings.

Ottawa, the capital of the Dominion of Canada, is built upon the banks of the Ottawa river. It has a population of about 25,000. I was struck with its magnificence on the one hand, and its incompleteness on the other. There is plenty of water-power in the vicinity of the city, which is utilised for saw-mills and other purposes, and the visitor cannot but be struck with the large piles of deals, cut into the proper lengths, which cover many acres. The scenery round the capital is beautiful, and the dry transparent atmosphere enables one to see to a great distance.

The following were the prices of some of the commodities in the market at Ottawa: Butter, 20 cents per lb.; mutton and beef (by the quarter) 5½ to 6 cents per lb.; eggs, of a good size, 20 cents per dozen.

I do not propose to give my route day by day, but to offer a few remarks respecting some of the places I visited in the Province of Ontario, making them follow one another, in proper order, as far as possible.

On leaving Ottawa, I went through the district watered by the river of that name as far as Pembroke, prettily situated on Lake Allumette. Some of the land is cleared; and about Pembroke and Renfrew there are large tracts devoted to farming purposes. Stone and bricks (the latter made from clay found in the neighbourhood) are used for building purposes, and in many places some capital buildings are being erected, which is indicative of progress. The country is practically a new one, and is only just being opened up. The lumber trade is the principal industry.

On our way from Ottawa westward we passed Brockville, named after General Brock, who fell at Queenstown in 1812. It has about 7800 inhabitants. We next came to Kingston, one of the older cities, with a population of about 13,000. It has not increased so rapidly as some other places, although it is more ancient than many, having been an important town when some of the existing ones were not thought of. It used to be a garrison town when British troops occupied the country. It is now the seat of a military college where young Canadians receive a military education, under the tuition of English officers. The next place we arrived at is Belleville (the capital of Hastings County) with a population of about 7000, and growing rapidly. The town is lighted with gas, and is a large commercial centre. Large quantities of barley are here exported to the States. Coburg is our next stopping-place (population 5000). Six miles further, and we are at Port Hope, where there are some fine farms and good residences. Coburg is also seat of a Wesleyan College. Then we come to Newcastle. The land about this place appears to be of a superior quality and well cultivated. The selling price is about 75 to 80 dollars per acre, according to the position of the land and the state of the buildings. While staying at Newcastle with Mr. Betts, I had an interesting interview with Mr. Allan Wilmot. He was one of the pioneer settlers in this neighbourhood more than fifty years ago. He now lets his farm (200 acres) at about 4 or 4½ dollars per acre, and he is prepared to sell it for 80 dollars per acre.

I also visited the fish-breeding establishment at Newcastle, which is under the management of Mr. Wilmot. The brother of the above-named gentleman kindly explained to me the interesting process of fish cultivation.

A little further on and we arrive at Whitby. The land through the townships of Clark, Darlington, and Whitby is excellent. I saw many farms in good condition. This season's crops were good, and the cattle and sheep were of a superior class, especially the latter. Cotswolds seem to be the favourites. The price of land varies from £5 to £16 per acre, and farms can be rented from 4s. to 16s. per acre.

The next place I visited was Toronto, called the Queen City of the Dominion, and capital of the Province of Ontario. It has a population of about 80,000, and it gives one an impression even

at first sight of being a thriving and populous place. On our arrival I was introduced to the Lieutenant-Governor, the Hon. J. B. Robinson, and to the Mayor (Mr. Beatty), who accompanied us in a tour through the city, Houses of Parliament, colleges, parks, and the various public places. It is really a beautiful city. Its streets are laid out at right angles, one of which, Youge Street, I was informed, extended into the country for sixty miles as straight as a line, excepting for one slight bend about thirty miles out of the city.

The first farm I visited in the neighbourhood was about twenty-six miles distant, at Bronte, on the road to Hamilton, with Mr. Breechon, a gentleman from Wiltshire, England, who was in a treaty for the purchase. The farm belongs to Mr. White, of Milton. It consists of 415 acres in capital condition, with new buildings replete with every modern convenience. There is also a neat residence built of concrete, in a nice situation. There is plenty of water, and most of the land is cleared of stumps, which have been so arranged as to form a substantial fence round the farm. All the crops had been reaped and harvested except thirty acres of oats, which were then being cut. These oats, I was informed, were sown on the 10th May, and my visit was on the 12th August. There was a field of swede turnips, almost the best I have ever seen. They were sown on the 10th June. Twenty-four acres of orchard are also attached to the farm. The crops of hay and corn were abundant. The price asked for this estate, including buildings, is about £12 10s. per acre.

I then went on to Hamilton, a place after the same style as Toronto, situated on one of the bays of Lake Ontario. There I conversed with several of the farmers, who appeared to be happy and contented, health and satisfaction appearing on every countenance. I also paid a visit to the vinery of Mr. Haskins, the city engineer. This vinery is twelve acres in extent and gave an excellent yield. It forms a part of the holding of Mr. T. Barnes, whose farm is in excellent condition. He has grown a crop of wheat on the same ground for four years in succession, and is preparing it for the fifth. He informed me that he had never had less than forty-five bushels per acre, but he makes a very liberal application of manure every year. He has also a large apple orchard, and the fruit was being gathered while I was there.

I next went to Burlington with Mr. Hurd to inspect his farm and nursery, which are characterised by fertility, neatness, and order. His crops were really excellent, and the buildings in good order.

On our way back to Hamilton we passed through a good farming district. Most of the land was cleared and under cultivation, and appeared to be fairly well farmed. Improved farms can be had in this district at from £8 to £16 per acre.

SUCCESSFUL EMIGRANTS.

While at Hamilton we took an opportunity of going to Brantford (where we were introduced to the mayor, Dr. Henwood) to inspect the famous herd of shorthorns, founded by the late Hon. George Brown, senator. We were shown over the farm by Mr. Hope, the manager, and saw, I suppose, the finest herd of cattle in the world. The farm is managed on the most approved principles. The crops of mangels and swedes were excellent, also the Indian corn, which is used as green fodder. The farm is now owned by a joint-stock company, and includes among its shareholders some of the best agriculturists of this country. Sales are held periodically at various places in the United States and Canada, and the cattle are in great demand. When at Brantford, I saw Mr. Burrell (a hale and active man of seventy-two years), who came to Canada from Bardney, Lincolnshire, in 1830. He had no capital then, but by hard work and thrift he acquired sufficient money to buy three farms. He now lives on his means, his sons working the farms. This is but one of many similar cases I came across during my travels. We went from Brantford towards Paris, and looked over several large farms, amongst others that of Mr. Luck, who arrived in this country twenty-three years ago, from Kent, England, with a capital of £31 10s. He now owns a farm of 200 acres, nearly all paid for. The soil is a sandy loam. The clover upon wheat stubbles was something marvellous; it was from a foot to eigh een nches in length, in full bloom, and presented the appearance of a regular clover field.

We drove back from Brantford through Mount Pleasant, calling at farms on the way. There were some well-cultivated lands in this section of the country, which has been longer settled than many other parts I have visited. We passed an orphanage supported by Mrs. Laycock and her brother, Mr. Cockshott, from Colne, in England. While in Brantford, I was the guest of Mr. Plewis, who is a genial, intelligent and hospitable gentleman. He is a Yorkshireman, from Hornsea, near Hull. He is doing a large business as a miller. The price of wheat in Brantford was 90 cents to 95 cents per bushel. I noticed that a roof was being put on a new cotton factory at Brantford, which has been erected by Mr. Slater, late of Barnoldswick-in-Craven. There seems to be a fine prospect for that business in Canada.

From Brantford I made my way to London. *En route* I noticed the same prodigious crops of fruit as I had seen in Wentworth and Brant. Mr. Riley gave me an apple that measured 14 inches one way and 13 the other. While in London, I met Mr. Rich, who was from Carlton-on-Trent. We were 'raised,' as our Canadian cousins would say, within a few miles of each other. He is

doing a large business in grain, and has made his money in the country. He started without any capital, but is now a wealthy man. The city itself is a miniature of our own metropolis. Its river, bridges, parks, and principal streets are named after similar places in the capital of England, and they even possess a newspaper called the *Echo*. The surroundings of the city are very pretty, and the substantial residences and well-kept gardens all speak of the prosperity of the people. I visited the estate of Mr. Wm. Kaines, which is for sale. It is situated in the county of Kent and Plantagenet, on the Ottawa river, about 40 miles from Ottawa city. 434 acres are in one block and 150 acres detached, of which 50 acres are cleared, the rest being in timber. Fifteen dollars per acre is the price asked for the property. The soil round the city of London is a rich loam. I should think from my experience that a market gardener would get on well in this part. The land is good, and the growth of vegetables prodigious. Round London is a very fine farming district: in fact, one of the finest that I had, up to this time, visited. Land could be obtained for about 80 dollars per acre (£16), including buildings. Grain was selling at 90 cents per bushel.

On leaving London I made for Windsor, where land of very good quality, I found, could be bought at from £5 to £8 per acre; while in Middlesex the price is from £10 to £16 per acre. There does not appear any reason for this difference in price, as the soil in the county of Kent is generally equal to that in Middlesex.

Leaving Windsor, I drove along the road by the Detroit River, and called to see the stud of blood-horses owned by Mr. Chappelle. He has some very handsome animals.

We then drove through a fertile but indifferently farmed district. On our way from Windsor to Gosfield we passed through the township of Maldon, and there saw some good land, but it could be improved by better cultivation. The township of Colchester possesses the same general characteristics as that of Maldon.

Passing along by Harrow, the land was teeming with vegetation, and the weeds were not the least luxuriant. Many patches of tobacco were growing on the French-Canadian farms. I also saw a great number of pigs along the roadside. They were not all of the best quality, but did not appear to give much trouble in feeding.

LANDS.

I next went through a fine district along the shore of Lake Erie. The land was very fine, but much overrun with rag-weed and other rubbish. The farmers excused themselves by pleading the unusual quantity of rain that had fallen this summer; but the land is of a dry, sandy nature, and, in my opinion, no difficulty need be found in keeping it clean. It is really a wonder to me how they can afford to grow so much thistle and weed—the most expensive of all crops, and the least profitable.

After making a call at Leamington, near to the Island of Point Pelee, which consists of 5000 acres of cultivated land and about 8000 acres in wood, we drove on to Ruthven, and afterwards to the villages of Cottam and Essex Centre. The land through this district was good, but badly farmed. It seems capable of producing anything, in large quantities, and would, I think, be very profitable if in the hands of energetic farmers. At Essex Centre I met Mr. James Matthews, land agent, and Mr. John Milne, the president and manager of a considerable saw-mill and sash and door factory, which articles are likely to be largely exported, and will provide employment for many carpenters and joiners as the trade increases. They told me they had land in this locality, on which timber is growing, that they could sell at a price which the value of the timber would more than cover. The soil is of a dark loam, rather heavy, but of great depth; and on portions of the cleared land crops of Indian corn were being reaped.

From Charing Cross we took the stage to Morpeth, and passed on our way several small villages, and a larger town called Blenheim. There is some fine land in this county, and well farmed. The land round Morpeth is very fine, and fruit abounds everywhere. We were met at the hotel by Mr. John Duck, who, with Dr. Smith, accompanied us to the farm of Mr. Gardner. He has upwards of 200 acres, and has greatly improved it. Mr. Gardner makes a very liberal use of salt as a fertiliser, with very good results in the yield of grain and in straw. He has some good cattle, and I particularly admired a shorthorn bull. He had not, at the time of our visit, sold his wheat, but he informed me that last season he obtained 1 dollar a bushel, which gave a good profit.

I then visited Colonel Desmond, who has a valuable farm of upwards of 200 acres. In soil and general features it is much like Mr. Gardner's, but in a higher state of cultivation. The colonel is a fine military-looking man of eighty-two years of age, and was working in the field when we got there. He showed me a splendid lot of hogs of the Berkshire breed, of various ages. He has made a good deal of money out of the farm, and is still working it profitably.

The whole of the land in this district is good and well cultivated. It can be obtained from about £8 an acre.

Our next drive was through a section of country somewhat inferior to the above, but far from being bad. It improved as we neared Ridgetown, where there is some good land

—a loam resting upon a gravelly subsoil. Land at this place was stated to be valued at £10 an acre.

Chatham is the next place we arrived at. We visited several places of interest in the neighbourhood, including Mr. Taylor's woollen factory, and examined the cloth, which, while it cannot be compared with the English manufactures in point of finish, is yet a good production.

From Chatham we went into the country to see the land, and the way in which it was managed. We called at Mr. Dolson's farm, where I saw a garden laid out with great taste. His farm has an area of about 400 acres, and is in very good order. He was well satisfied with the crops this year, and his Indian corn, which was then standing, was something marvellous—the finest crop I saw in Canada. It would probably yield more than 60 bushels to the acre. He had also some excellent oats.

We travelled through some good land in this district, and it is well cultivated on the whole.

FACILITIES FOR THE CHEAP TRANSFER OF LAND.

Chatham is situated on the River Thames, and steamers run between it and Detroit. It has excellent railway communication, and every facility for transporting its products and manufactures. The surface of the country around Chatham is very taking to the eye. It was formerly marshy, but sluices or open drains have been cut through the land right to Lake Erie, a distance of about thirteen miles. The soil in the district is not surpassed in any part of the province for depth and general fertility, but is capable of improvements by further drainage. The land bears a general resemblance to that of the Fen districts in Lincolnshire.

I had an opportunity during my stay in Chatham, through the courtesy of the Registrar, of inspecting the simple and cheap system that is adopted for the conveyance and transfer of land in Canada. All the holdings in every township are numbered, and the deeds of the same are kept at the office of the Registrar, together with accounts of all sales, transfers, mortgages, etc., so that the title of any property can be verified without difficulty. The whole expenses in connection with the transfer of land, including the lawyer's fee, very often does not exceed £1 8s.

The land from Exeter to Wingham, through the town of Clinton, is of excellent quality, and the same remark will apply to the country for twenty miles between Wingham and Lake Huron. There is a marked thoroughness about the farming in this section of the country. Where the land is cleared of timber and stumps it is put into a capital tilth for crops. Barley and wheat seem to be favourite crops for some miles around Wingham. Most of the land around this neighbourhood was wild bush fifteen years ago. A large school has recently been erected at a cost of about £2000 sterling, which is very creditable to the 3000 inhabitants of the place. The school-rate amounts to more than one-half of the entire rates, but these are low, and one does not hear any complaints. The price of land is about 40 dollars an acre for partially cleared land. I may say that the woodland is regarded equally as valuable as the cleared, on account of the timber.

Near Wingham is a butter manufactory. The whole of the butter is taken by a Glasgow firm, who pay 4 cents per lb. more for it than the local market prices, which average about 20 cents per lb. The establishment is owned by the farmers of the district, who send their milk into the factory daily, and are paid according to the quantity they furnish and to the price the butter realises. There are many manufactories of the kind in Canada. I formed a very high opinion of this district, and the land is cheaper than at some other places I came across, averaging from £5 to £8 per acre.

When at Newcastle, the Rev. Mr. Betts drove me out to the Lake Shore, where I met some grain-dealers. Barley was being quoted at 60 cents per bushel, and wheat was from 85 to 90 cents per bushel.

While in Toronto, Mr. Rennie, a seedsman of that city, kindly drove us round Scarborough and the adjacent district.

We went to Mr. S. Beattie's farm. Mr. Beattie is well known all over Canada as an importer and exporter of first-class cattle. He was present at the last Royal Agricultural Society's show at Carlisle, and purchased some of the finest animals exhibited for breeding purposes. He had some excellent root crops. In this case, as in every other where special attention is paid to the fattening of cattle, there is a corresponding attention to root growing.

We passed several other farms, among which was that of Mr. Andrew Hood, the prize ploughman. I was much surprised at the excellence of the ploughing in Canada generally. Mr. Rennie had some of the best crops of carrots and mangels that it has been my lot to see. We saw pumpkins growing which were 35 lb. in weight, and squashes 150 lb. each—likely to be 275 lb. before they stop growing, and swede turnips of good size, indicating what can be done in fancy farming. The grain crop was stowed away in the barns in excellent order. Mr. Rennie informed me that in seventeen years' farming his smallest crop of barley averaged 38 bushels to the acre, and that he had one year an average of 55; his corn was also of good quality.

We next went to the farms of Mr. Thomas Hood, Mr. John Gibson, and Mr. Hood, junr. These farms were in excellent cultivation.

We continued our journey to Mr. Robert Marsh's farm, where we inspected a fine flock of Southdowns, which had obtained prizes at various shows in the country. Mr. Marsh has been trying lucerne, and speaks favourably of it. He thinks that on rich land it might be cut three times a year, and that it should yield two or three tons per acre at each cutting. I may say here that he took nine medals and nine diplomas at the Centennial Exhibition at Philadelphia, and that his prizes last year were eighty in number.

We next visited the farm of Mr. Russell, who has some fine shorthorn cattle. Finer specimens than some of the animals cannot, I am certain, be found in Canada. We also looked at his flock of 120 Cotswold sheep. Some of them were weighed with the following results: Four-year-old ewe, 345 lb; three-year-old, 323 lb.; two-year-old, 323 lb.; one-year-old, 310 lb. The farm is over 300 acres in extent, and he has another 150 acres a short distance away. The price of land varies from £5 to £16 per acre. The soil throughout this district is of a good quality and well cultivated.

Our next journey was to Guelph, to see the model farm. It is practically an Agricultural College, where young Canadians receive a thorough knowledge of farming. In the advantages of this valuable institution, any ratepayer, or the son of any ratepayer, is entitled to share, on condition (1) that he is not less than fifteen years of age; (2) is of good moral character; (3) is in good health; (4) is of fair educational attainments; and (5) that he intends to follow horticulture or agriculture as a profession. The tuition is free, board and washing only being charged for, and a man can earn enough by his labour to nearly cover the whole of his expenses. I was pleased to make the acquaintance of the manager (Professor Brown), and President Mills, who appeared to be specially qualified for the posts they fill.

During my stay in Toronto, myself and Mr. Sagar visited the Milton district.

SUCCESSFUL EMIGRANTS.

We passed on to a farm belonging to Mr. White, occupied by Mr. Thomas Boak. This is a good farm, well cultivated, and stocked with a superior class of shorthorn cattle, some of which Mr. Boak has imported from England. He is a native of Cumberland, and came out to Canada about twenty-five years ago without capital, but by industry he (like scores of others I meet with in Canada) is now able to purchase a farm. His taxes amount to about 40 dollars per annum for the 300 acres.

We also visited Mr. Brain's, who, with his father, were pioneers in this part of the country. He came from England, and in addition to his farm brews lager beer. He started with little or no capital.

We also went through the village of Campbellville, in the township of Nassagowey, county of Halton, and among others I met Mr. Jonathan Adamson. He had the good fortune to select a fine piece of land (200 acres). He has improved it by the erection of a stone dwelling-house and substantial buildings. The soil on the farm is of good quality, and in a state of excellent cultivation. Mr. Adamson settled here about forty years ago, and was able to give us interesting information respecting the settlement of this fine township. He started without capital, but now owns a fine farm. Mrs. Adamson's father, Mr. Trudgeon, was the first settler in this district, when the country around was a dense forest. There was not even a road from Toronto, and they had to find their way through the forest. Mr. Adamson came out from England. He is now over seventy years of age, and is hale and hearty. I found no farm in this county in neater trim, or more profitable cultivation, than that of Mr. Johnson-Harrison, of Milton. Here the thistle, the great drawback to Canadian farming, is not allowed any quarters. He keeps some entire horses of the roadster class—fine animals. He also has a superior herd of short-horned cattle.

I stayed in the district of Halton for a few days, and received much information from Mr. White, who accompanied us through the county. The price of land appears to run from 40 to 80 dollars per acre; for renting, about 3 dollars per acre may be taken as an average. The following are the principal towns in the county of Halton: Oakville, about 2000 inhabitants; Georgetown, about 2000 inhabitants; Acton, 1000; Burlington, 2000: Milton, 1200. The population of the whole county is about 25,000, consisting principally of English, Irish, Scotch, and native Canadians. It is a fine grain and grass-growing country, also a favoured location for fruit crops, and is famous for its strawberries. Its position is between Toronto and Hamilton, and the county is traversed by four different lines of railway.

RISE FROM POVERTY TO WEALTH.

On arriving at Ingersoll, we called at the farm of Mr. Wilson, who came out from England with his father, in 1832. When they arrived here they were the happy possessors of 3 dollars (12s.) Now every branch of the family is wealthy, owning, among other property, 1200 acres of land of good quality, with neat and substantial residences. We also inspected a cheese factory

upon his farm, and while partaking of refreshment listened with intense interest to this fine and intelligent Yorkshire emigrant of nearly fifty years ago. I may add that their wealth has been obtained from agricultural pursuits, and that the land does not represent all their wealth. These cases speak for themselves, and show what can be done in Canada by hard work and thrift.

We next visited, among several others, Mr. Agar, who farms 400 acres of land of good quality. He also milks 60 cows, and makes a large quantity of cheese. The houses for the cattle were undergoing extension and alteration. The stables are well arranged, and have every convenience. He started with a very small capital, but is now in a position of affluence, which has been obtained, as in Mr. Wilson's case, from agriculture.

We visited several cheese manufactories in this locality. They are conducted on the same principles as the butter manufactories, described elsewhere.

An inspection of this district shows how easily and profitably the land can be devoted to grazing purposes. The soil is a rich loam, somewhat undulating. The brick and stone residences, with their cedar walks and neatly trimmed lawns and hedges, and the orchards, with their golden burdens, form a picture difficult to equal in the finest districts of the Old Country.

I now proceed to devote a few lines to Tilsonburg, which is becoming an important place, thanks to the energy and enterprise of its founder, Mr. Tilson. The town is in the county of Oxford, and its valuable water privileges have already given an impetus to the establishment of manufactories. It possesses a saw-mill, corn, oatmeal, and pea-splitting mill, a large brewery, and a sugar manufactory nearly ready. A large quantity of beet is grown in the neighbourhood. A manufactory for drying fruit for exporting has also been started, and they expect to use 25,000 bushels of apples alone during this season.

Building materials are very cheap. White bricks (very durable) cost 5 dollars per thousand; lime, 2 cents per bushel; hard wood, 2 dollars; and soft, 1 dollar per cord (4 feet square, 8 feet long). This, taken in conjunction with the extensive water-power available, prognosticates a busy future for this young town. It is also said to be probable that any new factory started would get a subsidy, and perhaps exemption from taxes for a certain time; so there appears to be a good opening.

We went round Mr. Tilson's farm. The land is good and well cultivated; the country around is a fine farming district, and not inaptly named 'Goshen.' In driving around I came across two namesakes, George Curtis and W. Curtis, who came from Lincolnshire. They and another brother arrived in Canada without capital, and are now in the happy position of being their own landlords.

The price of land around Tilsonburg and Goshen varies from 30 dollars to 60 dollars per acre (£6 to £12), and, though near the town rather light, is of a capital quality.

Continuing our journey to Barrie, and having been joined by Professor Sheldon and Messrs. Sagar and Donaldson, we paid a visit to Bradford. Some of the land we traversed was inferior, but about Newmarket and forward to Bradford it was of good quality. We were joined at Bradford by Dr. Morton, the Reeve of the township, and drove out to Rond Head, calling at Colonel Tyrwhit's, who owns upwards of 200 acres of land in good cultivation. He has some good horses, cattle and sheep, and excellent root-crops. We also visited Mr. Stoddard's farm, the greater part of which is under-drained. This southern portion of Simcoe seems equal to the best parts of Ontario. At Mr. Stoddard's farm I had a conversation with one of his men, who came from Whitby, Yorkshire. He had been there fifteen months, and during the first twelve months had managed to save 100 dollars. His wages were 110 dollars, including board and lodging, so that he had nothing but clothes to find. He is now getting 126 dollars per annum, and hopes to save a still larger sum this year. To use his own words, he 'means to have a farm of his own before long.' We then went on to Barrie, the county town of Simcoe. It is one of the largest counties in Ontario, the dimensions being roughly 156 miles by 80, and, generally speaking, is a fine agricultural country. Barrie is very prettily situated upon a bay of Lake Simcoe.

We left Barrie in order to make a visit to the Muskoka district, and were accompanied by a party of gentlemen to Gravenhurst, where a railway is being made to connect with the Northern Pacific. I will give you generally my impression of this district as it is attracting a good deal of attention. Its scenery is very romantic; indeed, it is called the Wales of Canada. It is well watered. Part of the soil is good, and part is rocky. I have seen some very fine samples of roots and grain raised in the district, and think it is likely to become an important district both for the growth of cereals and the raising of live-stock. The population is increasing rapidly, so I was told, and the free grants of lands are being availed of. On returning to Barrie, we called on Mr. Bridges, who is a breeder of Hereford cattle. He owns a large amount of land—about 1800 acres, I think. He has a farm of cleared land, and is clearing about eighty acres every year. He told me that a good deal of the land has cost him nothing, the timber having realised more than the price of the land. Most of the farms in the district present similar features to that of Mr. Bridges', though to a more limited extent.

Before leaving Canada I had an opportunity of visiting the agricultural show at Hamilton. It comprised many of the same features that I observed at the Toronto Exhibition; indeed,

many of the cattle and most of the general articles did duty at both places. Gravestones were shown at Toronto, but coffins were also on view here—so that the usefulness of the shows are rather extended, covering both the living and the dead. The machinery, hardware, and carriages were very good, and the former exhibit excelled Toronto if anything—which is not a matter for surprise, when one is informed that Hamilton is the Birmingham of Canada. The horses and cattle were good classes. One fat ox, shown also at Toronto, scaled 2850 lb. The pigs also, of the Suffolk and Berkshire breed, can be commended. I had the pleasure of an introduction to his Excellency the Governor-General (Marquis of Lorne) here, and had an interesting interview. I found him very affable and pleasant.

Just a few concluding remarks about the show. There was a cloth-cutting machine of very ingenious construction; a splendid show of the Wanzer sewing-machines; and I must not forget to mention the implements shown by Mr. Copp—they deserve much commendation for their neatness and lightness. The fruit-show was also excellent, and as a conclusion I may say that I had a basket of very fine grapes given to me at Hamilton (grown by Mr. Hurd in the open air), which I brought to England, and when opened, after three weeks, were in perfect order. It, therefore, is not unlikely that this fruit may form a no inconsiderable feature in the exports of Canada at some future day.

We next made our way to Niagara to see the famous falls of that place. The district between Hamilton and Niagara is famous for its fruit-growing, especially for peaches. It seems to be quite a profitable trade, and I was told the fruit of the district was celebrated all over the continent of America. The land about St. Catherine's is light, and not very valuable for farming purposes. As to the falls, so many have given a description of these mighty waters that it is almost superfluous to mention the subject; but as no one has seen them with my eyes, I suppose I ought to say something about a spectacle so world-renowned. It is truly a sublime sight to behold. There is something akin to disappointment at first, but as the whole is gazed at, and its grandeur impressed upon the mind, it becomes awfully magnificent. The rapids above and below the falls are only less beautiful because less awe-inspiring.

GENERAL SUMMARY.

I have now finished my detailed report, and propose to summarise, under convenient heads, my opinions generally about the portions of the country that I had the privilege of visiting:

Climate.—It may be said generally that the summer heat and winter cold are greater than in England. But it is only fair to remark that owing to the dryness of the atmosphere, the heat is not so inconvenient as it would be in our murky climate. At the same time it has a wonderful effect in bringing to maturity the fruits of the soil. Oats can be sown and reaped in three months, and fruits are grown to such perfection and in such luxuriance as to surprise one from the Old Country. Almost everything that grows in England will grow in Canada, but vegetables and roots attain a greater size in the latter, and melons, tomatoes, peaches, and excellent grapes ripen to perfection in the open air.

As regards the winter, the degree of cold as registered by the thermometer is undoubtedly much greater than in this country, but the air is so dry and so exhilarating, that the season is looked forward to as one of enjoyment. It would seem from this that the dampness of the air is a great factor in deciding the effects of cold, and I certainly heard no complaints in Canada of the winter. It has one drawback certainly, and that is the necessity of housing the cattle and sheep in the winter, but as shipments can notwithstanding be made at a profit, and as the cattle trade is being largely developed, this is apparently not considered a serious disadvantage by our Canadian cousins. I may add also that apple and peach trees are left unprotected during the winter without any injury to their vitality.

Soil.—Speaking generally, the soil of Ontario is of a loamy nature, some light and some clayey, but in the latter case it does not appear to be so heavy and difficult to work as the clay lands of England. This may be owing to the clay being less tenacious, or by the pulverising effects of the winter frost. I may say that I saw no real surface clay soil. There was, of course, subsoil of that nature. In a country so large as the Province of Ontario many different kinds of soil are naturally found—good, bad, and indifferent; but the former seems to preponderate, as the diversified products and the luxuriance of their growth demonstrate. But the land has not been used well. It must have been exceedingly rich at one time, but continued cropping and careless farming is bound to bring its results, and the lesson cannot fail to be useful. The effects are seen in the better system of farming that is now being adopted, and to the greater attention that is being given to dairy farming, to the fattening of live stock, and to the consequent extended growing of root crops, all of which will tend to recuperate the soil. Drainage too is now being looked after, and more in this direction may yet be done in some districts.

Free Grants of Land.—Upon this point I cannot do better than quote the following extract, taken from a work issued by the Government of the Province of Ontario: 'Every free-grant settler over eighteen years of age is entitled to select 100 acres, and every head of a family 200

acres. The conditions of settlement are set forth in the following clause of the Free Grants and Homestead Act, Revised Statutes of Ontario, cap. 24, sec. 8: "No patent shall issue for any land located under this Act, or under said regulations, until the expiration of five years from the date of such location, nor until the locatee, or those claiming under him, or some of them, have performed the following settlement duties, that is to say: have cleared and have under cultivation at least fifteen acres of the said land (whereof, at least, two acres shall be cleared and cultivated annually during the five years next after the date of the location to be computed from such date), and have built a house thereon fit for habitation, at least sixteen feet by twenty feet, and have actually and continuously resided upon and cultivated the said land for the term of five years next succeeding the date of such location, and from thence up to the issue of the patent, except that the locatee shall be allowed one month from the date of the location to enter upon and occupy the land; that absence from the said land for in all not more than six months during any one year (to be computed from the date of the location), shall not be held to be a cessation of such residence, provided such land be cultivated as aforesaid."'

Just a word in regard to these free grants. No one should choose them in a hurry. There is plenty of good land, but as much care should be exercised in its selection as if it had to be bought, for it is a matter upon which the success of the settler primarily depends.

Ontario as a Field for Settlement.—My opinion on this point is that a man has every chance of doing well in Ontario, and that many have succeeded is demonstrated by the examples which I found in the course of my travels. I may be asked, and it is a fair question, whether I would care to live in the country myself and adopt it as my home? In response, I can say that if ever I did emigrate, Canada is the country I would go to. Indeed, such a change as regards associations would be very little, as Ontario is much the same as England, its inhabitants all hailing from the Old Country, having been born here, or descended from earlier emigrants from our shores. In a pecuniary sense the change would be productive of great advantage. In the first place a less capital is required; one can buy as much land in Ontario for a dollar as in England for a sovereign. This is a rough and ready calculation, but is sufficiently near the mark. For labourers Ontario offers great advantages to steady, hardworking, and thrifty men. They get good wages, and may look forward to being able to start on their own account if they are careful. Most of the labourers are boarded and lodged in the farmhouses, so that single men are preferred; but in the neighbourhood of the towns and villages this is a disadvantage not without remedy in the case of married couples. But I think Ontario farmers would be serving their own interests if they were to erect cottages for the men, and thus foster a class similar to the farm labourer of England.

Capital Required.—In the first place, I may say that improved farms vary in price from £8 to £16 per acre, which includes fences and all buildings, in fact a farm ready for occupation, while land of similar quality can be rented at from 10s. to 20s. per acre. It is, therefore, easy to calculate what capital a man ought to have. He would, of course, have to buy implements and cattle and seed, to enable him to make a start, and the amount to be expended under this head would, of course, depend upon the means of the farmer and the system which he would adopt. I may remark here in parenthesis that land and buildings can be bought in the Eastern Townships for £4 or £5 per acre. It is said that on a free grant a man should have £100 or £150. He would not, of course, be able to put a whole farm into work at once with this amount of capital, but each year he would be getting a return and be adding to his capital, and thus be able to extend his area each year. Until a man had enough ground under cultivation to occupy him entirely, he could earn good wages for his labour in spare time, which would also help him. Many have started with little or no capital, or at any rate much less than the figures named above; but this can only be done by dint of hard work and self-denial, which, after all, are in any case the first elements of success.

I may add that I did not come across any grumblers in my travels. The people seemed happy and contented. I may say further, that I was only asked for alms on one occasion, and my inquiries elicited that he was not a Canadian, but a man on tramp from Rochester, in the United States. As regards taxes, I found on inquiry that they averaged from £5 to £7 per 100 acres, and a few days' labour (or its equivalent) in connection with the roads. There are no tithes, income-tax, or anything of that kind.

Produce.—The average crops of wheat range from 20 to 40 bushels per acre, though the average for the Dominion is less. Mr. Rennie never had less than 25 bushels. Oats, barley, and Indian corn yield good crops, as also roots; vegetables are abundant; potatoes, carrots, and the like are larger than in England; peas and beans flourish; all kinds of fruit grow in great luxuriance, peaches, apricots, melons, tomatoes, and grapes coming to maturity in the open air. Good as the crops are, they are capable of improvement, by better farming and a more liberal application of manure, and the scarcity of labour tends to increase the expenses. Dairy produce is also now coming to the fore, but I intend giving some statistics as to this later on.

Cattle.—Grade cattle, taken herd for herd, are equal to any that will be found on this side of the Atlantic. They also have some fine herds of pure breeds of various sorts, as my readers will remember. There has been no cattle plague or pleuro-pneumonia in Canada, so that the Dominion is not included in the scheduled countries. The cattle are therefore admitted to the

English markets alive, which is an advantage not possessed by American stock raisers. The breed of sheep is generally good, and the cross is favoured rather than the pure breeds. There is a good deal of controversy as to the best cross, and many different opinions are adopted. Pigs are generally a good class. The horses are lighter than our agricultural horses, but they are strong and active, and adapted for the road or harder work. Praise is certainly due to the efforts that are made to improve the quality of the stock. The finest cattle and horses are being imported every year for breeding purposes, and many prize-winners at our shows find their way to Canada, at no small expense to the importers. The herds of pure-bred cattle, in various parts of the country, contain many excellent animals; and those at Bow Park, and at Mr. Cochrane's farm in the Eastern Townships, have a reputation by no means confined to the American continent.

Markets and Means of Communication.—The province has good rail communication, as a glance at a map will show; and as to markets each town has at least two each week, and the villages one. A farmer has no difficulty in getting rid of all his produce. As regards barley, I am told that the greater portion of it is sent to the United States, where it is much esteemed.

Implements.—I was much struck with the implements I saw. They are light, yet strongly made, and easy to handle. The Americans used to control the markets for these goods, but I am told they are now almost entirely superseded by Canadian manufactures.

System of Farming.—I have mentioned this under the head of 'Soil.' The great fault seems to have been the want of a system. Mixed farming I am satisfied is the best thing an Ontario farmer can adopt. By raising cattle he is obliged to use his straw, and to grow root crops, thus affording the means of keeping the soil well manured. It is true that wheat and other exports do not fetch the same price as they do here, but the cost of producing them is less. The price of food-stuffs is low; bran, for instance, costing only a third of what it does here.

Exports.—The following figures are useful in showing the progress of Canada as an agricultural country. Exports in 1878 of wheat and flour, 10,895,468 bushels; other grain, 12,923,871 bushels; in 1879, of wheat and flour, 12,671,435 bushels; other grain, 11,270,195 bushels. In 1878, 5,635,411 bushels of wheat, and 2,621,581 bushels of other grain were imported into the Dominion; and in 1879, 4,768,733 bushels of wheat and 2,190,358 bushels of other grain. But most of this was for exportation from Canadian ports, on account of cheap freights and better facilities for getting to the sea-board, and not for home use. In fact the import of wheat decreased in 1879 by 1,000,000 bushels, while the exports increased by 2,000,000 bushels. The export of flour in 1879 was also equal to 3,000,000 bushels. The following are the exports of butter, cheese, and eggs during 1878 and 1879: 1878, 13,006,626 lb. of butter; 38,054,294 lb. of cheese, 5,268,170 doz. eggs; 1879, 14,307,977 lb. of butter; 46,414,035 lb. of cheese; 5,440,828 doz. eggs. Exports of horses, cattle, sheep and swine: In 1878, 14,207 horses, 30,456 cattle, 242,989 sheep, 3201 swine; in 1879, 16,635 horses, 49,257 cattle, 308,393 sheep, 6498 swine. These figures are taken from a work published by Mr. W. J. Patterson, the secretary of the Montreal Board of Trade.

Lands for Sale.—It may be asked, why can land so readily be bought, if the prospects for a settler are so good? There are several reasons for this. One is that many of the settlers obtained their lands for little or nothing; have cleared them, erected buildings, and have the farms under cultivation. They are now worth a good sum. With the capital acquired by selling now they wish to take up fresh lands and get those into cultivation, adding to their means in this way. I came across a man at Wingham to whom this applies. Many go to Manitoba, which is attracting so much attention. Another reason is that the occupier may have got into years; his sons have taken to professions or commercial pursuits rather than farming, and he desires to retire and live on his capital. I was informed of this by a man at Milton who had a farm to sell. Then, again, some are due to bad farming. The occupiers have not used the soil well, and rather than take the trouble of adopting higher farming and manuring their lands, prefer to go to new land, where they can continue their unwise and shortsighted operations. Others wish to take larger farms.

Social Aspects.—Just a few words upon this subject and I finish. The Canadians possess the characteristics which are usually found on this side of the Atlantic; yet they seem to be a little different from the phlegmatic Englishman. In fact, they combine the 'go' of the American with the caution of the Britisher. They are very sociable and hospitable, and I think, taking class for class, they live in better houses than we do in England, and are more extravagant in the way of furniture and 'fixings.' This I especially noticed in my visits to farmhouses. There is of course very little aristocracy, the distinction between classes being, I think, expressed by the words capital and labour; and there is more freedom and more equality between man and man in Canada than in England; which is generally the case, I believe, in most of our Colonies. Now I leave Canada. I enjoyed the trip much, and made many friends, and shall always remember with feelings of pleasure my sojourn in that country; and if I have not specifically mentioned all those to whom I am indebted, it is for want of space, and not that I have forgotten their kindness. On our way down the St. Lawrence the autumnal tints of foliage

formed a spectacle not easily forgotten, and would require the brush of an artist, the mind of a poet, or the tongue of an orator to do it justice.

I came back in the Allan Line steamer *Sardinian*, under the command of Captain Dutton. We had a congenial company of saloon passengers. There was Miss Macpherson, of the Orphan Institution, at Galt, and Miss Scott and Miss Combs, who had been with her to Canada. I was also pleased to meet John McLean, Esq., of Montreal, who was a passenger of the same ship that I went out in. We also had the Hon. D. A. Smith, Sir H. Allan, Mr. Lonsdale, and Mr. Monson; also Mr. W. P. Cubitt, a British delegate from Norfolk; Mr. Hickson, of the Grand Trunk Railway, and many others of a like genial and intelligent stamp, of whose agreeable and instructive conversation I shall ever entertain a pleasing recollection.

QUESTIONS.

'Mr. Curtis, who was loudly cheered, expressed his willingness to answer any questions gentlemen desired to ask; he courted the questions for the sake of giving information.

'Mr. Davis (Gargrave), said the Craven farmers would be much benefited if they could obtain from Canada, in the spring of the year, a supply of lean cattle; and he inquired of Mr. Curtis if he thought the Canadian farmers could meet their wants in this respect.

'Mr. Curtis replied that his impression was that the Canadian farmers could profitably supply us with lean cattle, but they wanted to send them in the autumn, whereas the Craven farmers wished to have them in the spring. The Canadians were undoubtedly going in more for cattle-raising, and he believed lean cattle would in the future become a considerable item of the exports from that country. In support of this view, he quoted the opinion of Mr. Hickson, the manager of the Grand Trunk Railway, who was on board the vessel on which he returned to England.

'In answer to the question as to whether the farm-buildings in Canada were of brick, stone, or wood, Mr. Curtis said the stables and houses for cattle were generally of stone or brick up to the first story, and above that, of wood.

"Question.—Are the roads very bad, and is it inconvenient travelling in the country districts?

'Mr. Curtis replied that at certain periods of the year travelling must be inconvenient. It was in the summer that he visited the country, and then the roads were very good; and he was informed that in a great part of Ontario they were good, although it was admitted that for a week or two after the breaking up of a frost they were bad. The roads generally were gravelled, but the gravelling was such as would hardly deserve that name with us.

'The chairman said it was admitted that the English farmer could not compete in wheat-growing with the virgin soils of Canada. He should like to know what Mr. Curtis's opinion was of the power of the exhausted soil of Canada as compared with the wheat-growing districts of England.

'Mr. Curtis said it was a difficult question to answer. It was often discussed in Canada in his presence. Sometimes one conclusion was come to, sometimes the contrary. He did not believe in some of the statistics which had been published in England. He did not think the Canadians could put wheat down in this country for 30s. a quarter, as had been asserted. His own impression was that Ontario would soon be beaten out of the field by the corn-growing districts of the Far West, just as England was beaten by Canada. Canadians were much favoured by their climate, but we could grow vastly more per acre. He was told that the average this year in England was 27 to 28 bushels per acre. Probably the average of Canada was not more than 20 bushels per acre, so that there were 7 or 8 bushels per acre in our favour. Then there was the cost of transit, and in his opinion we had not much to fear from them. There would have to be a re-adjustment of rents in this country in the corn-growing districts, but he believed England was not going to be wiped out yet.

'In reply to another question, Mr. Curtis said that Ontario generally was well watered.

'On the motion of Mr. H. Holden, of Halton East, seconded by Mr. Davis, a vote of thanks was given to Mr. Curtis for his able report.'—*Craven Pioneer*, November 20, 1880.

REPORT OF MR. R. H. B. P. ANDERSON,

Of Listowel, Co. Kerry, Ireland,

ON ONTARIO, MANITOBA, AND THE NORTH-WEST.

Some months ago I was asked by a number of friends to go out to Canada and report on the country in general, and Manitoba in particular, as a field for emigration. Accordingly, I left Ireland in July, that I might reach Canada while the crops were still growing, believing that in this state they are as good a criterion as it is possible to obtain of the soil and climate of a country. I have now returned after a very pleasant and instructive trip, and have not only seen the crops growing but some of the grain cut; have witnessed many of the ordinary Canadian farm operations; have seen their cattle early enough to be able to judge what they must have been after the longest and severest winter Canada has experienced for years, and late enough to observe what a few months' feeding on the 'wild prairie' can do. I travelled for hundreds of miles over the open prairie during the hottest part of the Canadian summer, and having camped in the middle of the marshes can speak from personal experience of the inconvenience of the heat, and of those pests, the mosquitoes and black flies. I have taken some little trouble in investigating their school system, and have visited the farmers in Ontario and the settlers in the North-West; in fact, I have seen and done all that was possible in the limited time at my disposal, and am happy to say that on the whole I was much pleased.

There is no doubt that Canada has its drawbacks, and many of them, as well as its advantages; but he must be blind indeed who cannot see a wondrous future before it—in fact, to quote a popular author, it is 'the future world, the great Titan-baby, which will be teeming with new Athens and Londons, new Bacons and Shakespeares, Newtons and Goethes, when this old worn-out island will be—What?'

Before applying myself to the main part of my subject, *i.e.*, the agricultural and commercial capabilities of the country, I should endeavour as far as possible to remove from the minds of my readers a few unjust prejudices and erroneous ideas too commonly entertained by the people of these countries concerning the Canadian people, Canadian travelling, and the sea-voyage, as it is my belief that there are many persons kept at home in comparative want who might do well in Canada were they not deterred from trying their fortunes there by their notions on these subjects. About the sea-voyage I may say it is simply a pleasure-trip, its only fault being its shortness.

I crossed to Quebec in the steamship *Sarmatian*, of the Allan Line, and returned in the *Sardinian* of the same Line, both magnificent vessels, on board of which it is impossible to realise the 'dangers of the deep.' The extreme caution of the captains when the slightest fog appeared was almost irritating to our landsman's ignorance, but at the same time it made us feel perfectly safe in their hands. The passage out occupied but seven days and a half, we were only four and a half days out of sight of land. On the fifth we were sailing up the St. Lawrence—one must see the glories of this magnificent river to be able to realise it. The arrangements on board the vessels for the comfort of all passengers, whether saloon, intermediate, or steerage, are as complete as they could well be. With regard to that bugbear, sea-sickness, I can only say that he is quite as black as he is painted; but he seldom holds his victim long, and as he vanishes, as if in reparation for the mischief he has done, he leaves behind a feeling of health and elasticity which makes one almost thankful for his visit; besides, one suffers much more in the English Channel in an ordinary steamer than in crossing the Atlantic in an ocean boat.

As to the travelling in Canada, when I say that I have travelled over some 6000 or 7000 miles of the North-American Continent, more than 5000 of which have been either by rail or steamboat, it will be allowed that I am in a position to speak of its dangers and inconveniences. So far as one could see, there is an entire absence of that 'go-ahead' recklessness which we associate with it, and which was one of its characteristics in olden times. The railway tracks are extremely well laid, and seem perfectly safe; the speed does not exceed 35 miles per hour; the carriages are most comfortable, and the Pullman cars either as day or sleeping compartments are perfect. I have made a journey of 90 hours there with less fatigue than I would one of 12 hours here. The carriages being close to one another, and connected at each end by a platform, a passenger can walk the full length of the train (often nearly a quarter of a mile long) and enjoy the fresh air outside the carriage door, avoiding the miserable feeling of

confinement which one has in the carriages at home. The arrangements about luggage are such that it is almost impossible for it to go astray, or even give trouble to the owner. One is never in danger of being hungry when travelling, for if there be not a dining-car attached to the train, it is sure to stop at three stations during the day, where good meals for a moderate charge can be had.

But above all these, the extreme courtesy shown by all classes makes travelling delightful. The coarse and disgusting habits we attribute to the American are a thing of the past, or else they have good feeling enough to restrain themselves where indulging them would offend; and strange to say, in a country where all are smokers, a lady need not fear having her delicate senses hurt by the use of 'the noxious weed,' for no one ever thinks of smoking except in a carriage set apart for the purpose. When, in addition to all these advantages, there are intelligent and obliging officials, railway travelling need not be regarded with apprehension.

The river steamboats may well be called 'floating palaces,' and their management seems to be in safe hands. I was extremely surprised, though amused, to find that a rough day was quite enough to keep many of these boats from crossing Lake Ontario. On one occasion I was unfortunate enough to be one of fifty or sixty passengers on board the only boat that put out from Toronto for the day, and paid for the temerity of the captain by being more sea-sick than I ever have been before or since.

Of the good-nature of the Canadians I need hardly speak—it has become proverbial; I will only say that I have never experienced greater kindness in my life than during my stay among them. Independent the Canadian certainly is, both in mind and manner—perhaps, to our old-country idea, disagreeably so; but his independence falls far short of that self-assertion usually attributed to him. It is rather the independence of men 'too full of self-respect to be either servile or uncourteous.'

I may say, without fear of contradiction, that there is not a more law-abiding or loyal people in the world than the Canadians; nor any country where a man, having acquired property, will have his title thereto more respected than in Canada.

Energy, perseverance, and pluck no one will deny that they possess to an extraordinary degree who sees their beautiful cities and remembers that comparatively a few years ago the ground on which they stand was clothed with primeval forests, the home of the Indian and the wolf.

The first land I touched in Canada was at Quebec. One of the first objects that attract attention before reaching Quebec (some nine miles from the city), are the Montmorency Falls, looking like a streak of silver down the side of the brown cliff. Quebec is beautifully situated on a hill commanding magnificent views of the river both above and below the city; but excepting these views, and the historical associations connected with it, the place is uninteresting. There is a large lumber-trade done, and lately a new wharf has been built, also elevators, in the hope of securing some of the corn trade. I doubt the expectation being realised, for it seems to me that Montreal is the natural (present) port for the West. I say present, for, should the Hudson's Bay route be opened—and I believe that is now a certainty—the trade of Montreal will receive a severe blow, for much of the grain coming to Europe from not only the North-West but the United States, will be shipped *viâ* Port Nelson.

At Point Levi, directly opposite to, but divided from Quebec by the river, I saw some magnificent cattle and sheep taken off a ship just arrived from England. They comprised shorthorn and polled Angus cattle, and Cotswold and South Down sheep. Our Canadian cousins, alive to everything by which the material prosperity of their country can be advanced, have seen the benefit to be derived from a good strain of stock, and spare neither trouble nor expense to obtain it. I am informed that the land in the southern parts of the province (Eastern Townships) is good.

Going into Montreal, one passes through a splendid tubular bridge—the Victoria—some two miles long, crossing the St. Lawrence, and arrives at an untidy, wretched station—one quite unworthy of Montreal, which is, as regards size and importance at least, the chief city of Canada. Montreal is beautifully situated on an island formed by the rivers St. Lawrence and Ottawa, at the foot of Mount Royal—hence its name. The mount has lately been turned into a public park, which will undoubtedly be one of the finest in the world. The views from it are glorious. Montreal is a city of which the people are justly proud, and is the chief outlet of Canadian commerce.

Here I had my first experience of Canadian hotels; in the arrangement and management of which, as in most other things, they are ahead of us. Nothing is left undone to promote the comfort and convenience of guests. Their charges are moderate, but their system of making them is very unlike ours; one charge is made of so much per day, which includes everything—that is to say, bed, attendance, and four meals. At the very best hotels in Canada the charges range from 10s. to 12s. per day; and for this sum you can live in a style, and amid comforts you would look for in vain in Ireland. Neither has one to run the gauntlet between rows of waiters, 'Boots,' etc., expecting to be 'tipped' on leaving a Canadian hotel. The island of Montreal, which is about thirty miles long by nine wide, contains good land, and the farmers in the neighbourhood are well off.

The next city I visited was Ottawa, the Canadian capital. Here I had the pleasure of meeting

Mr. Lowe, the secretary of the Agricultural Department, who kindly gave me much useful information, and put me in the way of seeing the country to advantage.

About twenty-five miles from Ottawa there is some prime land, and I was informed on the best authority that the whole valley of the Ottawa, which is composed of a light sandy loam, is admirably suited for the cultivation of the vine, and is expected to be a wine-producing region in the immediate future; indeed, I saw vineyards myself of several acres in extent, the vines looking healthy, and giving evident proof that they can be grown to advantage. They have a great many varieties of hardy vines, which, with very little care, can be kept through the severest winter without receiving injury. France and Germany may yet find a rival in Canada for their light wines. Ottawa itself is nicely situated on the river Ottawa, and contains the Houses of Parliament, which are really beautiful structures. From them one has a splendid view of the river. The ordinary buildings in the town are good, but the streets are anything but well kept, and there seems to be very little trade in the place except in lumber. I visited the Chaudière Falls, close to the town. They are very fine. Here I was greatly struck with the utilitarian spirit of the Canadians, the waters being turned from their natural course over the falls to work mills for cutting timber. I went into one of the lumber mills close by, worked solely by the river, and was almost deafened by the eternal 'whirr' of the saws. I was told that in this mill, during the three months it works, they cut upwards of 40,000,000 feet of lumber. Both here and at Montreal I saw the true Canadian horse—small, slight, wiry, and full of pluck—not adapted, apparently, for heavy work, yet astonishing the beholder by what it can do.

ONTARIO.

The next city I shall mention is Toronto, the capital of Ontario, the richest province of Canada. The city is situated on the shore of Lake Ontario, and is beautifully laid out; many of the streets are lined with trees, and the lovely avenues remind one of a park. Here I received much kindness from Mr. Donaldson, the Government agent, who piloted me about and pointed out the various objects of interest—the university, model-schools, park, etc., etc., and we had a sail on the lake. Mr. Donaldson is one of the oldest inhabitants of the place, and remembers when, about forty-two years ago, there were but eight houses in it. An old-country visitor looking round him, finds it tax his imagination to believe this. Toronto is the fountain-head of the Canadian educational system, which, so far as I can judge, seems perfect. 1st, There is the Public School, in which every child is entitled to receive a free education; next comes the High School, the charge for which is about £1 a quarter for each pupil. There is a Public School and High School in each district; the High School course is a very comprehensive one. The master's tenure of office in these schools depends on his success as a teacher, and as there is a wonderful amount of rivalry between them the pupils are sure of having every attention; indeed a gentleman who was for many years a most successful master, told me that the post is one of the most arduous that can well be imagined. After these schools comes the Collegiate Institute, and, lastly, the University itself, the fees for which amount to about £10 per annum. The pupils in each school are examined twice a year by public examiners, and those who show sufficient proficiency are raised to the next school above that in which they pass. I think the whole system, both as regards cheapness and thoroughness, will favourably compare with any in this country.

The province of Ontario is a magnificent farming country: it was here I first began to learn what a dangerous competitor in agricultural produce Great Britain and Ireland have in Canada. With a soil equal to any in the world, and practically unlimited in extent; the very best strains of cattle and sheep that can be purchased for money increasing daily in number; labour-saving machinery of the very finest description, and farms extensive enough to warrant its use; cheap food; a country which can, and will in time, supply every want of its people; and above all, a people who seem to have erased the word 'impossible' from their vocabulary, it does not require the gift of prophecy to say how the competition will end. One thing is absolutely certain—the small farmers of Ireland, even supposing they had no rent to pay, must succumb. The soil of Ontario of course varies, but, as a rule, is good, being from heavy clay to rich clay loam and sandy loam. In many districts the land is a good deal run down for want of proper farming; for, taken as a whole, the Ontario farmers are not models I should advise my countrymen to copy. Among other faults, they entirely neglect the rotation of crops; and many seem to think manure unnecessary. However, they are rapidly improving in their methods, and I have met many excellent farmers who do justice to the soil they cultivate, and are, as a consequence, reaping a rich reward.

The climate of Ontario is healthy, although severe. The heat in summer is intense; the cold in winter, though not as great as that in the North-West, is, I am told, more trying, owing to the comparatively greater degree of dampness that exists. I am inclined to believe that the indiscriminate cutting away of the forest has injured the climate, and renders it more uncertain than it would otherwise be. The dry summers that sometimes occur are, I think, attributable to this cause. But that it is healthy in the extreme is beyond question: both the people and the cattle being living proofs of it. When one sees the purest shorthorn cattle bearing the Cana-

dian winter with shelter and food much inferior to that considered necessary for them in this country, yet in as good a condition as can be desired, one must conclude that the climate is a good one. The heavy yield of all descriptions of crop proves that it is one suited for the agriculturist. Melons, peaches, grapes, etc., ripening in the open air tell what the summer can do.

CATTLE, SHEEP, HORSES, PIGS, ETC.

I did not visit any of the extensive herds of pure-bred cattle that Canada can boast of, being satisfied that they existed. I may just say that having first imported their stock from this side, they are now able to sell us animals for enormous figures. One that I have seen myself was bought as a nine-month-old calf by Mr. Talbot Crosby, from Mr. Cochrane, of Compton (E. Townships), for, if I mistake not, £850.

I thought it more to my purpose to see what class of cattle the ordinary farmer was able to rear, and great was my astonishment to find on farms of 150 or 200 acres of land (the ordinary size of a Canadian farm), shorthorns of the very best families, which they cross with the native cow, producing very good animals indeed, either for the butcher or the dairy; and sheep that would raise envy in the breasts of some of our flock-masters in this country; the South Downs surprised me much, as I was inclined to think the cold climate would not suit them, and expected they would be small and puny, but such was not the case. Up to the present, the Cotswold seems to be most in favour. The pigs, too, are excellent. I saw some Suffolk and Berkshire pigs in Ontario that would do credit to any breeder in this country. I may mention, in passing, having seen a beautiful shorthorn cow, 'Isabella,' the property of a Mr. Russell, of Markham; she was a perfect animal of her kind.

I shall here say a few words on the prospect of the cattle trade with this country. I believe it to be only in its infancy, and that five years hence Canada will be able to send us one hundred pounds of beef for every one she sends at present, and of almost, if not quite, as good a quality as our home-fed beef. My reasons for this opinion are as follows:—Until a very few years ago, the Canadians had none but native cattle which, when crossed with a good breed, produce very fair animals, but are themselves inferior except for the pail; and as they only required these for dairy purposes or work-oxen, the calves, as a rule, were destroyed as soon as dropped. Now, not only are there several extensive herds of pure-bred cattle in the country, but it is no uncommon thing to find ordinary farmers with a couple of pure-bred bulls and good-sized herds of excellent 'grades' (crosses between the native cow and shorthorn or polled Angus bulls, this last-named breed being admirably suited to the country). The calves are all reared, and as dairy farming has not paid so well the last few years, and the cattle trade with England has been tried and is found remunerative, many men have turned exclusively to rearing and feeding cattle for the English market. At present the Canadians are, and will be for some time to come, behind us as feeders; but they are fast finding out the increased value which oil-cakes and other concentrated foods give, not only to their beef, but to the manure. Up to the present, by far the larger number of Canadian cattle sent to us are 'distillery fed.' A man makes a contract with a distillery company for the 'swill;' and this, with hay, is all he gives his beasts. They thrive well and make good beef. When a farmer ties up his cattle he considers them worth about two dollars per cwt. (of 100 lb.) He can buy them for this sum, and is fully satisfied if he gets five dollars per cwt. for them when finished. It appears to me that a little more time and a little more knowledge will make the cattle trade a great success—for Canada. But what about these countries? I may here remark, that our railway companies might do worse than take a lesson from their Canadian brethren on the treatment of cattle while in their care. There is quite as great a difference between the cattle-waggons in the two countries as between the passenger-cars. In Canada, cattle are taken on at once to their destination, and not kept for hours here or there on the road, as in this country.

I saw some very good Clydesdale sires in Canada; crossed with the Canadian mare they make a good animal, but heavy horses are not required, indeed, would be undesirable there—at least for the farm. The Canadian horse is quite strong enough for the ordinary work, and is a marvel of activity and endurance. I heard some complaints in Manitoba of the mortality among horses imported there, but after sitting behind the same pair for six days, doing forty miles per day on an average, and seeing the treatment they often of necessity undergo in that country, I was only astonished that the death-rate was so low; horses in this country would not last two days if they received similar treatment. I have run short of oats, and as a consequence my poor cattle had to go for twenty-four hours with nothing to eat but soft prairie grass, as I was not always able to get even hay. Their gentleness, too, is wonderful. I had a striking example of this, having had to drive a pair of horses over sixty miles with their shoulders literally cut away: doing so nearly sickened me, but there was no help for it, and yet the noble brutes never even winced. I have got into difficulties and out of them again, without hurt to either horse or trap, that in this country would have meant the utter destruction of both. They seem to take everything in a most matter-of-fact manner; if down, they will lie quiet until freed, and yet are full of pluck.

CROPS AND FRUIT.

Considering the cultivation they get, crops of all kinds in Ontario were very good. I shall give what I was told was the average yield of some of the principal crops, but I would say that it is absolutely absurd to talk of the average yield of any crop either in Ontario or the North-West, one man being able to raise thirty bushels of wheat and fifty of barley to the acre, while his neighbour under similar conditions, but with less skill, can only raise sixteen of the one and thirty-five of the other. 'Average yields,' under these circumstances, are no criterion of what the soil can do; it is my belief that most of the arable land in Canada, if properly worked, will produce crops as heavy as any land in the world—of course allowing for climatic influences. Here are the yields as I got them: Spring wheat, 14 to 19 bushels per acre; fall ditto, 24; barley about 40; oats about 45; peas, 25 to 30; potatoes, 300 to 400; turnips, 600 to 800; mangels about 1000.

It must be remembered that these crops are raised on land, for the most part, indifferently farmed; crop after crop of wheat being taken from it for years in succession with the least possible quantity of manure—indeed, in some cases none. The Canadians are utterly innocent of the use of artificial manures. But contact with old-country farmers, and the strong common-sense of the Canadian, will soon improve his farming; and I think I am safe in saying that, with improved agriculture, an increased yield of at least one-third would result. I saw a field of carrots, mangels, and turnips grown by a Mr. Rennie of Scarborough on virgin soil; they were better than any I have ever seen in this country. Mr. Rennie, who is an exceedingly intelligent man, showed me, with honest pride, some of his ploughed land. No doubt the friable soil he had to deal with did not present the difficulties to the plough that our heavier and more stony land does; but if Mr. Rennie throws down the gauntlet to the ploughmen of this country, I would advise none but the very best to take it up.

Timothy is the 'tame' grass, as they call it, usually sown for pasture or hay; they also use 'orchard grass,' answering to our cock's-foot, which is a good pasture grass. Timothy yields from two to three tons per acre at one cutting; and when the season admits of it there is usually a second cutting of about equal weight. In Canada the acre is a statute acre. Some of the farmers have tried 'lucerne' as a soiling crop with great success; on fair land it may be cut three times in the year, and yields from two to three tons each cutting. Clovers do well; but the best crop is maize, which is cut when about ten inches high, and gives a wonderful return. They have tried Italian rye-grass, but it has been a complete failure.

Taken altogether, Canada is not such a fruit country as I had imagined. In Quebec little or none is grown; the same may be said of Manitoba and the North-West. Ontario, however, is exceptionally adapted for fruit-culture. Apples grow to perfection all through the province, and no homestead is complete without its orchard of from five to ten acres. It struck me that most of the farmers make a mistake in planting too many varieties, as they seldom have enough of any one kind for exportation. The southern part of the province is a perfect fruit-garden, producing grapes, peaches, etc., in great abundance, and of very good quality, though not equal to our hot-house grapes and peaches. If the members of the Fruit Growers Association are any judges of the suitability of the climate, etc. (and we must suppose they are), the more tender kinds of fruit are not grown at all to the extent they might be. A member told me that owing to the elevation of the country about Guelph and the nature of the soil, it might be taken for granted that any fruit which could be raised in that district would do well in any part of the province. At Guelph I saw, in the garden of the Agricultural School, about twenty varieties of grapes growing in the open air apparently to perfection. I had also the pleasure of walking through Mr. Stephenson's extensive orchards, in which I saw a variety of fruits of wonderful excellence.

DISEASES OF CROPS AND ANIMALS.

Both cattle and crops are wonderfully free from disease; in fact, neither horned cattle, sheep, nor horses seem to be affected with the diseases to which they are usually liable in these countries. Wheat suffers occasionally both from smut and rust, but to no great extent, and the former is preventible. A dry summer generally leaves the turnips to the mercy of the fly. The pea is sometimes a good deal damaged by the ravages of a little insect. The potato-bug, although known in Canada, is no longer regarded with the feelings of dismay it excited at first. A little Paris green, about 1 lb. to the acre, generally makes short work of this pest. It is a curious fact that it seldom attacks potatoes planted in new land.

SIZE OF FARMS.

The ordinary Ontario farm is from 100 to 300 acres; the capital considered necessary for proper working is from £2 10s. to £3 an acre. The houses of the better class farmers are comfortable brick structures of the Swiss villa style, and are many degrees more elegant and comfortable than the houses of better-off men at home. The same cannot always be said of their out-offices, however, though these are said to have been much improved within the last few years. Every homestead has a large cellar in which to store roots. The farms are generally divided into good-

sized fields by wooden fences; one rarely comes across a ditch or wall, but I have seen a hedge of the Osage orange, which makes a capital fence, the shrub being of a prickly nature. The snake fence is a useful one, easily made, but is untidy-looking; it is gradually disappearing. Owing to the dry climate, fence rails last for many years. Lately a barbed fencing wire has been introduced. It is an effective but a dangerous fence, and one, I hope, that will never be introduced here, or else good-bye to hunting. If an animal rubs against it, it is sure to be torn by the barbs; I saw two or three horses terribly injured by it. Each farm has, as a rule, a good water supply, for though there are not many running streams, there is any quantity of excellent water to be had by sinking for it, and there are numbers of good-sized rivers. There is usually sufficient timber on the farm for fuel and fencing purposes, and young plantations are being made on many of them. Numbers of these farms are now in the market, the price, which includes all improvements, varying from £20 an acre round Toronto to £8 in the more distant parts of the province. An excellent farm can be had, with well-built brick dwelling-house, out-offices, etc., in a good district, for about £12 an acre. There are three causes at work which place these farms in the market: 1st. Many farmers have so run down naturally good land that they find it no longer profitable to farm it in the old way, and are either ignorant of how to bring it into heart again, or have not capital enough to enable them to do so, and must therefore sell. 2nd. Many find the 200 acre farm too small to keep a large family together. The sons, of course, wish to be settled in farms of their own, and Manitoba or the North-West is the place they naturally turn to, and the capital realised by the sale of their 200 acres in Ontario is ample to start the largest family most advantageously in this new country. 3rd. Many farmers, having made money and liking town life, prefer to sell their farms and go into business.

Let it be remembered that the capital the original settlers started with to clear away the mighty forests was the strength of their muscular arms.

WAGES AND TAXES.

Wages are high, good men receiving from £30 to £35 a year with board in Ontario; women-servants from £20 to £25. Taxes are a mere bagatelle, amounting to about 1s. per acre, school-rate included.

I was agreeably surprised to find that drunkenness is not common in Canada; indeed, I was struck by the absence of spirituous liquors at the dinner-table in the hotels, and was amused when told by a waiter that any doubt about the nationality of a guest vanishes the moment he orders wine or beer, that being a sure sign of his hailing from the Old Country.

The rates of interest charged for money in Canada are very high; it is quite easy to get from 8 to 10 per cent. with the very best security.

ROADS.

The roads are not so good as in England. Road-rates are paid by labour, and, judging by the work done, the system is a bad one.

FREE LAND.

There is still some free-grant land in Ontario, in the Muskoka district, principally bush. The land, I believe, is good, but I did not visit it.

AGRICULTURAL COLLEGE.

I cannot conclude my remarks on Ontario without mentioning the Agricultural College at Guelph. Guelph itself is a fair-sized town in the county of Wellington, in the centre of a well-cultivated district. The land is pretty good, but not so rich as some other portions of the province. There are several extensive breeders of both shorthorns and Herefords in the neighbourhood; indeed, all the cattle in the district were particularly fine. The college is about a mile from the town, and is supported by the Province of Ontario. The farm connected with it contains about 500 acres. I inspected the system of instruction, which is very complete, including not only ordinary agriculture and stock-raising, but a practical knowledge of chemistry and veterinary science, two very valuable branches to the farmer, and very little known. The ordinary education of the student is not neglected, for I see an English and mathematical course laid down, which, if taken advantage of, will give the future farmer something more than his bullocks to think and talk of. Nor is horticulture forgotten, and I saw for myself that the student had, in the extensive gardens connected with the college, ample opportunity of making himself acquainted with that art which will enable him hereafter to beautify his homestead and supply his table with vegetable luxuries.

Among the live-stock, six breeds of cattle are represented, *i.e.*, Shorthorns, Herefords, Devons, Aberdeen polls, Galloways, and Ayrshires. Of sheep they have Cotswolds, Leicesters, South Downs, and Oxford Downs. There are also some very good Berkshire pigs. The fields, which, as nearly as possible, contain 20 acres each, are fenced with straight board fences, and are extremely clean

Turn where you will, evidences of careful management and sound judgment meet you; but

one would expect nothing else after having conversed with Professor Brown, who has the practical working of the farm. Professor Brown is making some experiments in cattle feeding and breeding and with various crops, which I am sure will result in much good. From Mr. Mills, the able president, I received great kindness. Not only did he, in conjunction with Professor Brown, show me through the various departments of the college, etc., but afterwards drove me to several interesting places in the neighbourhood.

MANITOBA.

On my way to Winnipeg I stopped a day at Chicago—a wonderful city, but one which, all the same, I should prefer to live out of. It bears about as much mark of the fearful fire which left it a heap of ashes a few years since, as London does of the 'Great Fire;' and its magnificent stone buildings preclude the possibility of a repetition of such a disaster. I visited the stock-yards, and found half the cattle and pig pens empty. I was informed it was a very small market. There were about 50,000 pigs and some 10,000 head of cattle. I went through one of the large slaughtering-houses (Fowler's), and saw the whole process of bacon-curing. It was marvellous, but very disgusting. They kill, on an average, 8000 pigs a day in this establishment. The corn-elevators in Chicago are worth seeing; I was surprised and delighted at the rapidity with which they either load or unload a corn vessel. Some of them hold as much as 500,000 bushels, and one, I believe, is capable of containing 1,000,000.

I stopped for a few hours at Minneapolis, celebrated for its wonderful mills. I went through one of them—the largest, they say, in the world—and was amazed at the perfect cleanliness of the whole place. There were numbers of ladies walking about, looking at the various operations, and their black dresses were as free from dust as they would be in a drawing-room.

While passing through Minnesota I saw one of the many ruses the Americans practise to prevent emigrants going into Manitoba, in which they see such a powerful competitor. I mention it here, as it may prevent many persons being deceived. I left my own carriage and went into one full of emigrants, for the purpose of questioning them as to their destination, prospects, etc. At one of the stations I remarked two Yankees, apparently farmers, chatting together in the telegraph-office. A little before the train started they got on board, but evidently wished to be thought strangers to each other. After a short time, one of them entered into conversation with a Scotch emigrant, and discoursed eloquently on the horrors of Manitoba—said it was a swamp that he had gone up there to farm, had lost nearly all he possessed, and given it up as a bad job. He called the whole thing 'a big take-in' on the part of the Canadian Government. The other fellow, meanwhile, joined in and recounted his experience to a gaping audience; and then both praised Minnesota and Dakota in the most extravagant terms, pointing out the very country we were passing through (splendid land some of it appeared to be) as a specimen of what they could get for next to nothing if they chose to settle in the neighbourhoods in which they said they had just taken up land—curiously enough, one in Minnesota, the other in Dakota. I don't know how it ended, but I have little doubt they induced some of their hearers to remain in the States. The men were afterwards pointed out to me as 'touters.' I may say that great inducements were offered me by a land agent if I would consent to remain in Minnesota and get some of my friends to come out and join me there. To anyone intending to go to Manitoba or the North-West I would decidedly say, do not be kept back by any of the numerous American agents you will meet, no matter what apparent advantages they may offer you. Undoubtedly the land in Northern Minnesota and Dakota is nearly as good as that in Manitoba; but most of the good land—indeed, ALL of it within convenient distance of the railway—is in the hands of the railway company, and is dearer than land in Canada. Another thing the settler must bear in mind is that the average yield of Minnesota is but 18 bushels per acre, while that of Manitoba is 25.

A short time after leaving the station of St. Vincent we were whirled across that imaginary line which separates the United States from Canada, and I was at last in that land which had been haunting me day and night for months past—Manitoba. Must I confess it, my feelings were at first anything but jubilant. At Winnipeg, however, the bustle and business-like air that pervaded the whole place, late as the hour was, nine at night, reassured me somewhat, and this feeling was strengthened on reaching the 'Queen's' hotel, where I was shown into a most comfortable bedroom, as nicely furnished as one could wish. Next morning—Sunday—I explored the city, and was utterly astonished at what I saw. Some eight or nine years ago Winnipeg was a wretched village with a couple of hundred inhabitants; now it is a thriving go-ahead little city of 12,000 or 13,000 inhabitants, the floating population alone being estimated at 1000. I went into the Presbyterian place of worship and found assembled 1200 or 1300 fashionably-dressed persons; in fact, but for the organ, which I consider a decided improvement, it would not have been hard to believe I was in the church of some Presbyterian divine in the good town of Belfast.

Two very fine rivers join at the city of Winnipeg—the Assiniboine and the Red River, which are navigable for hundreds of miles. To give some idea of the importance of Winnipeg, I

may say that it supports three banks and some eight or ten very good hotels; has a very nice club and six or eight churches, which are generally well filled. There is a very fine college and public schools; the shops are much better than in any town of equal size in Ireland. One can get almost anything, from a 'white elephant' to a lady's hair-pin in them. The trade is both extensive and brisk.

On Monday I called on Mr. Hespeler, the Government agent at Winnipeg, who procured me horses, etc., with which to commence my journey North-West. I take this opportunity of thanking both him and Mr. Reed, the intelligent head of the Land Department at Winnipeg, and also Mr. Desbrow, for their kindness in giving me information and facilitating my movements in the country, and I believe I am safe in saying that any settler calling upon these gentlemen will receive courteous attention at their hands and valuable and reliable information. Mr. Hespeler introduced me to a member of Parliament from Ontario, who wished to see part of the country, and asked if I would allow him to be my travelling companion for a few days, to which I gladly consented. This gentleman is an example of what a little pluck can do in Canada. Thirty-two years ago he arrived in Ontario with no capital but his trade, that of a blacksmith; he has now retired from business, having amassed a large fortune, and is spending his time in travelling, and in attending to his Parliamentary duties. I started at noon on one of the hottest days of this year in Manitoba, on my North-West journey, but I felt no inconvenience from the heat, except being compelled to take my team along very slowly. For some miles outside the municipal boundaries there is a good deal of low, scrubby land, this district being a half-bred reserve settled almost entirely by half-breeds whose farming is not good. Yet, in spite of this, the evident want of drainage, and a late season, I saw some wonderfully heavy crops of wheat. The soil surprised me greatly. Having heard a good deal of it, I was prepared for something uncommon, but did not expect the black, rich, heavy loam which I found. I went but twenty-five miles the first evening, stopping at a small wayside inn for the night. My landlord took me to see a field of barley, sown on the 12th of July—it was eight or nine inches high on the 6th of August, when I saw it. He told me that if the September frosts—a light frost sometimes comes for a night or two early in September—did not cut it off, it would yield a fair return. To this point, and for some miles beyond it, the country seemed to need draining. Here I made my first acquaintance with the mosquito, or rather with a whole family of them. I had met single members of the tribe before, and I must say I should have preferred their room to their company. Next morning I started on my way at 5.30 a.m., and had to make a detour of nine miles to avoid an impassable part of the track. Now that the Province has been divided into municipal divisions there will be some effort at road-making. I was not sorry to leave the beaten track and have to strike out a course for myself through the prairie, it was a novel and enjoyable experience. I found the prairie not nearly so monotonous or uninteresting as I expected; there was not much heavy timber, but quite enough of one sort or another to brighten up the landscape, and a good deal of it was large enough for building purposes. From Poplar Point to Portage-la-Prairie the land seemed perfection; dry and workable soil, light, but rich in the extreme—evidence the magnificent crops of wheat we passed. I was greatly surprised by the number and variety of the birds—one species, resembling our blackbird, is becoming quite a nuisance, there are such numbers of them. However, they can easily be shot down if necessary. A farmer to whom I spoke of them shook his head, and said, 'They are bad enough, but there's plenty for us all; in spite of them I shall have over thirty-five bushels to the acre.' About High Bluff I saw several Indian encampments, they looked very picturesque, but less so than the occupiers with their peculiar dress. I had the curiosity to enter one of their wigwams—they might be cleaner without being open to the charge of fastidiousness. Portage-la-Prairie, which a few years ago was part of an uninhabited waste, is now a thriving little town with a couple of hotels, and half a dozen machine depôts. About twelve miles from Portage a Mr. McKenzie has very extensive farms. I was received by him with much kindness. Mr. McKenzie showed me two fields of wheat, off one of which he had taken ten crops in succession, off the other, two; the crops I saw were the eleventh and third, and the eleventh was ever so much better than the third, the ear being longer and the grain larger, while the straw was less luxuriant. He showed me two short horn bulls just up from Ontario; they were fair animals. Mr. McKenzie considers that cattle do even better in Manitoba than Ontario, in spite of the more severe winter—severe as regards degrees of frost only; otherwise it is a less trying winter, and cattle have not to be housed longer than in the lower Province. He is a good authority, having been an Ontario farmer himself. On this farm I saw some excellent roots, beet and mangel, and a magnificent crop of potatoes. About twenty or twenty-five miles North-West of Portage, there is a belt of poor land some twenty miles wide. As soon as that is crossed you get into beautiful dry rich rolling prairie, practically unlimited in extent. On my return journey I made another detour and was much pleased with the country. The great numbers of cattle I passed in wonderfully good condition shows plainly they can be kept without difficulty during the winter. These cattle were large, coarse, thick-skinned brutes, that a grazier in this country would despair of making anything of, yet here they were quite fat, and this after passing through the severest winter the Manitobans remember. So much for the

prairie grass; the introduction of good blood will give it worthier subjects to feed. I saw many magnificent work-oxen among them, and the cows, as a rule, appeared to be good milkers. These oxen are very useful for draught, their great strength making them particularly so in a country intersected with 'slews' and broken land. For 'breaking' the prairie they are invaluable, the sod being very tough, making it hard work for horses; besides, the ox requires no food but grass, and the horse cannot live without a liberal supply of oats. I am told that oxen trained in Manitoba are much better and faster than those brought from the United States; the latter are usually slow and very stubborn. I was amused on one occasion by the remark of an ox-driver. He had a pair of truly obstinate brutes to deal with, and was using both his whip and some very unparliamentary language without seeming to affect either their hides or hearts much. I said to him, 'You seem to have rather a hard time of it, my friend, since you find cursing and the whip no good. Why not try a blessing and a little gentle persuasion?' 'No use,' said he; 'I tried those in the beginning. I have been driving oxen for the last five years, and though you would scarce believe it, I was a religious man when I began, but I have at last come to the conclusion that one can't serve God and drive oxen; it is impossible.' The best authorities, however, tell me it is not impossible; that abuse seems to stupify the animal, but that gentleness with a judicious use of the whip will make them do good work. I reached Winnipeg late at night, the last ten miles having been got over amid the glories of the most magnificent thunderstorm I ever witnessed—the lightning was vivid beyond imagination. The thunder was not very loud or frequent, but the noise of the rain was quite sufficient to make up for this. There are usually a number of these thunder-storms during the summer, but very rarely is any damage done by them. Next day I left Winnipeg, prepared for camping out—and a most enjoyable way of living it is—and started in a south-westerly direction. I met my first mishap crossing the ferry just outside Winnipeg; my horses fell 'all of a heap' on the ferry-boat, but lay quietly till we relieved them, and then got up uninjured. We travelled for some miles close to the river; the land was first-rate, and much of it was covered with light timber. Near Morris I was struck by the peculiar appearance of some fields of wheat, part of which seemed to have failed, or to have suffered from some blight, while the rest was covered by a luxuriant crop. On inquiring the cause, the owner told me it was the effect of a hail-storm. These hail-storms sometimes do damage; they generally occur in July, and are extremely partial, cutting the crops down in a belt perhaps a mile wide, but perfectly straight, right through the district visited. It is well they are not very frequent. The farmers, however, do not make much of it, as they say there is always enough left to pay them. The return is generally eight bushels instead of twenty-five. Leaving Morris behind, I passed through an immense marsh on my way to the 'Lowe Farm.' The Messrs. Lowe have something like 19,000 acres in this neighbourhood in two farms. The land is excellent, but too wet; it is admirably suited for stock-raising, as there is abundance of hay. There is some difficulty about the water-supply, which, I am sure, will be overcome. They are fortunate enough to have one of the Government cuttings run near them, which will drain their land thoroughly, and it will then be fit for any purpose. I had from this place a drive through many miles of flat treeless prairie, much of it marshy, and I could boast a fair experience in the art of extricating myself from a 'slew,' by the time I reached Nelsonville, the land about which place is very fine, rolling, dry, and rich. Here I met a North of Ireland farmer, who seemed much pleased with the country: he had taken up 320 acres. My next drive was through the Pembina Mountains. I was greatly pleased with the land, which is rich and very easily worked. Three years ago there were not a dozen settlers in the whole district; now for fifty miles round there are few, if any, quarter sections unoccupied. In the big Pembina Valley, which is a really beautiful spot, I met two young Irishmen, Messrs. Armstrong and Atchison, whose only cause for grumbling was the scarcity of wives; they told me if I could bring out a cargo of eligible young ladies, I would make my fortune. Here two days' rain gave me a very disagreeable opportunity of judging what wet weather in Manitoba is. I was, however, none the worse for a thorough drenching, nor for having to let my clothes dry on me: I should not like to try the experiment in this country. Remarking on my escape to a settler, he said, 'Pooh! I am here four years, and have never heard a man cough yet.' I saw a good deal of the country in the direction of Rock Lake, but had not time to go as far as the Turtle Mountains. I next visited Mountain City, the property of Dr. Codd and Mr. Bradley. As this embryo city occupies a good and central position as regards some of the other towns, and is in the middle of a rich district, the owners may be congratulated.

About ten miles east of Mountain City is the Mennonite Reserve, which stretches forty miles towards Emerson. These people have a tract of magnificent land; they are very thrifty and hard-working, and, as contract labourers, are much better and cheaper than any others in the Province. But they are not over-clean, either in their persons or in farming. Their crops were very good, but showed careless cultivation. They grow very fine flax for seed. Their cattle also are very numerous and of fair quality.

Having spent a good while examining this settlement, I started for Emerson, which place I

reached late in the evening, and left it next day on my homeward journey, having travelled over several hundred miles of the country; and yet I feel it almost presumptuous to speak as having seen it, so small was the portion I examined compared with the vast whole. I shall now give some idea of the crops, climate, etc., under their various heads, and state the conclusions I drew from my visit.

CLIMATE AND SEASONS.

The climate of Manitoba and the North-West is one of their most serious drawbacks, but we are inclined to look upon it as a much more serious affair than it really is. Description will do little to remove these impressions: it must be experienced to be understood. At home, excessive heat is generally accompanied by oppressiveness, with its attendant weariness and inertia; and cold, as a rule, with dampness, which makes it raw and piercing. Now this is not the case in Manitoba or the North-West. The heat at 100° was undoubtedly very intense, but—and I speak from personal experience—without sultriness. I perspired freely, but otherwise felt no inconvenience, and had energy enough for any amount of work. This was an unusual degree of heat; the summer mean is, I believe, about 70°. Usually during summer there is a pleasant breeze, and the higher the thermometer stands the more likely is there to be a breeze. No matter how hot the day, the night is sure to be cool. In winter the cold is very great, but nothing like what it is at home in proportion to the degrees of frost; if it were, animal life would cease, for the thermometer sometimes sinks to 40° and 50° below zero—just imagine what that would mean in England!—but when it does so it is certain to be accompanied by a bright and perfectly still atmosphere and a warm sun. However, as a rule, it stands at from 10° to 15°. As I had not an opportunity of experiencing it myself, I was not content with the testimony of the ordinary settler concerning it, but had that of such men as the Bishop of the Saskatchewan and clergymen of various denominations, as well as bankers and others, on whose opinion I could rely. All agreed in saying that one feels no colder when the thermometer stands at 40° than when it is at 10° below zero, and that winter is a delightful part of the year. Numbers of people from Ontario said the climate of Manitoba compared favourably with that of Ontario. There are, however, slight deviations which are intensely disagreeable. In the summer there are sometimes extremely high winds and hail-storms, and in the winter storms of wind and snow—'blizzards,' as they are called. In spring and early autumn frosts sometimes occur, which do no good to the crops; but all these things apply to the Western States of America just as much as they do to Manitoba. Indians camp out in their wretched canvas-covered tents during the most severe winters, and white men, when hunting, have often to do the same, and think nothing of it. A curious fact is that Europeans, for the first two winters, bear the cold better than the Canadians themselves. Snow does not fall to any extent till the beginning of the year, and seldom exceeds an average of eighteen or twenty inches in depth. When the thaw comes it is unaccompanied by that abominable slushiness we have at home; the snow evaporates, leaving the ground dry. During spring and early summer an immense deal of rain falls; drought, which so often ruins the farmer in the United States, never occurs here. The dews are so heavy that one would imagine there had been a fall of rain in the night. The seasons are as follows: Spring, April and May; summer, June, July and August, and part of September; autumn, part of September to the middle of November; and then winter. Of course in so extensive a country as Canada there is some slight difference in climate. In Ontario the harvest is ten days earlier than in Manitoba. All agree that as regards health the climate of the North-West cannot be surpassed.

SOIL.

The soil varies much, as it is natural to suppose over so large a tract; but as a rule it is a rich, black, vegetable mould, working very like clay—rich beyond imagination—and resting on a marly clay. The depth of the surface soil varies a good deal, in some places not more than ten or twelve inches, in others as many feet. I am informed that chemical analysis has proved the soil to be the best adapted of any in the world for the growth of wheat, and certainly practical experience bears this out. It is very easily worked, becoming as fine as powder. However, there are all descriptions of soil to be had here, from the heaviest clay to the lightest sandy loam.

PRODUCTS.

Wheat, of course, is the principal product, barley next, and then oats. Indian corn (maize) does fairly in some places, but is not grown to any extent. Oats seem to ripen too fast, and while it yields a great number of bushels to the acre, is not up to the mark as regards quality. Potatoes are an excellent crop, both as regards quantity and quality (though I did meet some of a poor enough description); all roots grow to perfection. Among the grasses timothy and cocksfoot prove a success; clover yields a good return; lucerne and Hungarian grass thrive wonderfully. As regards the average yield I must say of this country as of Ontario, that it is absurd to strike an average. About twenty-five bushels is given as the average for wheat, but I have seen forty-five to the acre; six to eight tons is considered an ordinary crop of potatoes, with the most extraordinarily rough cultivation. Of course, climate is a very important factor, but I have no

hesitation in saying that any man who understands his business can secure in Manitoba heavier yields of any crop that will grow there than he can in this country, and with one-half the labour and expense. The natural grass is wonderfully nutritious, and is excellent food for cattle and sheep. Sheep-farming is getting more and more popular every day. Curiously, the sheep seems to prefer the coarser parts of the grass. I am doubtful of Manitoba ever being a fruit country; strawberries, raspberries, currants and plums will do well, and grow abundantly in a wild state; and I have seen apple trees that looked as if they might bear—it seemed a struggle with them to hold their ground; but peaches, grapes, etc., will not grow. Melons, tomatoes, etc., can be grown in any quantity, and of the very finest description, in the open air. Those I saw I thought finer than any I had seen in Ontario. Garden vegetables of all descriptions abound, and I was delighted by the blaze of colour the flower-gardens in front of the Mennonites' houses presented.

CULTIVATION.

June and July, and, in a wet year, part of August, is the time for breaking the prairie; the sap is well up in the grass, etc., which is easily killed by the summer heat when turned up, and the ground is wet, making easy ploughing. The sod is merely pared, the more lightly the better; the furrow turned is about fifteen inches wide. In the autumn or spring the furrows are backset, the plough turning about three inches of soil. In the spring the seed is sown, often without further ploughing, and harrowed in; as often as not, rolling is neglected. Wheat is sown from the 15th of April to the 15th of May, the earlier the better; oats till the end of May, and barley till the end of June. I have seen barley doing well that was sown on the 10th of July. The quantity of seed per acre is about the same of each, viz., two bushels. Harvest begins in the middle of August; potatoes, turnips, etc., can be sown till the 20th of June, and fall ploughing, the great secret of success, can be carried well into November. The hay harvest, in July, is a simple affair. Prairie hay costs about a dollar a ton by the time it is in the stack; a crop can be raised on the turned-up sod, but except as a makeshift the first year, it ought not to be done, the yield is sure to be poor. The farming implements are all of the very best description, made with a view to the saving of labour. A man with a breaking plough and a good team can break or backset one and a half to two acres per day, and with a gang plough and four horses about double that quantity. With a self-binding reaping machine attended by two stookers, from twelve to fifteen acres can be cut, bound, and stooked in a day. I have seen these machines do wonderfully clean work. Manure is of no value, and is either burned or carted to the nearest river (the Mennonites make fuel of it). It will be years before the land requires it, or indeed would bear it. I do not say that our high-class English and Scotch farming is at all necessary for success, but I am persuaded, and it is proved, that care and skill are amply rewarded; no farmer need fear failure in Manitoba. I have, among my notes, a list of fourteen men all getting on well, who told me that until they came to Manitoba they never lived out of town.

MARKETS.

Up to the present, and for some years to come, there is a ready market in the country for all kinds of produce, owing to the influx of settlers. The prices to be had for everything would almost pay in this country: wheat, in out-of-the-way places, 1½ to 2 dollars per bushel, and I have been charged as high as 1 dollar a bushel for oats—the general price is about 70 cents; potatoes as high as 40 cents, and everything else in proportion. Timothy hay sells readily for 15 dollars per ton. Two shillings a bushel for wheat on the farm would pay the grower. Long before the country is settled enough to lower these prices Liverpool will be the market for Manitoba and the North-West. Since my return from Canada I had the pleasure of hearing that the Canadian Government have made arrangements with a number of English capitalists for the construction of the Canadian Pacific Railway, binding them to have it finished within ten years. The line will be about 2800 miles long, so it is natural to suppose that within three years at furthest between 800 and 1000 miles of it will be completed; this, with two or three branch lines, which are also under contract, will open up and bring within marketable distance of Liverpool a tract of country that, no matter how rapidly settlement progresses, cannot all be taken up, much less cultivated, for the next forty years; besides this, in May of the present year, the Government granted a charter to a company, entitled the Winnipeg and Hudson's Bay Company, who want to open up the Hudson's Bay route; they are bound to have the railway to Port Nelson opened within six years. It is supposed that steamers, made on the same principle as the Sealing steamers, will be able to navigate Hudson's Bay for three months of the year. This route will bring the great wheat fields of the North-West nearer to Liverpool than New York is, so that on the score of markets for their produce the settlers have every reason to be satisfied. I think I am safe in saying that it will be possible to place wheat from the Saskatchewan on the Liverpool market for about 28s. per quarter, if not less, with profit to the farmer. And by the American storage system (our warehousing plan extended) a farmer might almost sell his corn to a buyer in Liverpool while it was still at the railway station nearest his homestead. By this I mean that a broker in Liverpool would feel himself safe in buying it. There is an elevator at almost every station for storing the corn. When it is taken in it is graded, and the

owner is given a docket showing the grade and number of bushels, which docket is negotiable anywhere.

CATTLE, SHEEP, AND HORSES

thrive well, and in spite of the long winter, during which they must be housed. Stock-raising is found very profitable, hay can be had in abundance, and cattle keep their condition well on it. I see no reason why they could not be shipped to England from Manitoba when the Canadian Pacific Railway is finished. At present there are not many well-bred cattle or sheep in the country, but the number is increasing rapidly year by year. I made searching inquiries regarding the danger of spear-grass to sheep, and found it was very much exaggerated; it is only to the careless or lazy farmer it presents any difficulty; it is by no means common, and in the districts where it grows it can be rendered harmless by eating it down early, or by running a mowing-machine over the patches of ground covered by it. I heard some complaints about the difficulty of keeping horses in Manitoba. In my opinion, and I judge by what I saw, it would be entirely obviated by supplying plenty of good hay and oats. Horses cannot live on the prairie grass. Mules are extremely good, some of them magnificent brutes, standing seventeen hands high; they seemed to grow fat on the grass, and are altogether hardier and more adapted to the country in its present state (till more timothy and oats are grown) than the horse, but they are much dearer. Oxen, however, are the mainstay of the farmer in cultivating his farm, in fact, in breaking the prairie he could scarcely do without them—they are powerful brutes, and for oxen, are wonderfully active; they cost nothing for keep, and also have the advantage of being cheaper than either horses or mules. An ox costs about £14, a horse about £25, and a mule about £35. Good milch cows can be had for about £8; sheep, 12s. to 18s. each. I forgot to say that the pig seems to be at home here, as everywhere else. I saw some prize Berkshires, eighty miles from Winnipeg, that had been brought from Ontario, and seemed happy in their new quarters. The ordinary diseases to which stock are liable in Ireland are unknown in any part of Canada, nor is there any, that I heard of, peculiar to the country.

TREE CULTURE

is comparatively easy. The soil must be dry, and in a state of thorough cultivation. Make the pits one-half deeper and wider than the roots require, and plant one inch higher than the old mark on the stem, at a distance of about seven feet apart in every direction. In making a plantation, if possible let a convex surface be presented to the prevailing wind, as this will greatly aid the growth. Keep the ground free from weeds and long grass among the trees, and, as the plantation rises, cut just enough to prevent the trees interfering with one another's growth. Spring, from 1st of April to 1st of June, is the time for planting. Two men ought to set about 200 trees a day. When the ground is ready for them, let the plantation be fenced in and protected from prairie fires, the natural enemy of forests in the North-West. It will be said, Where are trees to be had? There are millions of young plants in any of the belts of timber growing along the river-banks. Many species grow from cuttings, in particular the cotton-wood tree. In planting cuttings, sink them deep, leaving but one or two buds above the ground. Other kinds grow very rapidly from seed, particularly the soft maple, which I have seen 18 inches high nine months after the seed was sown; and plants but ten years old were from 8 to 10 feet high, and quite bushy. These are beautiful and useful trees. The seed is to be had in abundance. It ripens in June, and should be sown at once, as if it dries it fails to grow.

Perhaps I have been too particular in giving these details, but I consider tree cultivation of the utmost importance. Nothing can speak more strongly for the luxuriance of the natural grasses, and consequently for the richness of the soil, than the fact that these great treeless prairies do not suffer from drought, and are so wonderfully productive. It is well known that the destruction of forests over large tracts of country is usually productive of barrenness of the soil from two causes: 1st, moisture is not attracted; 2nd, any moisture there may be is evaporated from want of protection. Tree-planting also has a material effect upon the temperature, and breaks the force of the winds, etc. While I do not say that the North-West requires increased dampness, nor would it be an improvement in such a cold country, the value of the shelter afforded by plantation, putting all other considerations aside, cannot be calculated. If the Government would again put the tree-culture regulations in force, and have some simple instructions drawn up and circulated among the settlers, and forced the regulations to be rigidly adhered to, I think it would benefit the country.

FENCING

is an easy operation. I have known two men put down an English mile long of fencing in a day. The snake fence is much used.

BUILDING

is not at all so difficult as I had supposed. A settler can, by giving his own labour and that of his oxen, and hiring a man who understands the building of log-houses, have a comfortable log-hut put up—about 18 by 22 feet inside, with a good loft overhead, well-thatched, the crevices filled in with brick-clay, and nicely whitewashed—for about £15. These huts are warm and comfortable. Better-class houses are expensive, as lumber is dear in Manitoba, on account of the scarcity of timber. However, brick-clay can be had almost anywhere, and I believe bricks will soon be commonly used. The wooden houses in Winnipeg are being rapidly replaced by handsome brick structures.

WATER.

The settler must, above all things, make sure that there is a good supply of water in a neighbourhood before he decides on taking land there. Very often there is none but brackish water to be had in a whole district—sometimes none at all; but, as a rule, there is an inexhaustible supply of delicious water to be had by digging from 16 to 40 feet for it.

FUEL.

Timber is the principal fuel, but there are large peat-bogs in the country which, when properly utilised, will yield a fine supply of splendid fuel. It is black, hard peat, and gives an intense heat. There is also an ample supply of coal in the Saskatchewan district, which will come into use on the completion of the railway.

LABOUR.

There are plenty of men to be had, but wages are high. A man will earn from 8s. 4d. to 12s. 6d. per day during the spring and summer; but £30 to £40 a year with board is the usual hire of a man by the year. Women servants are scarce, and command almost as high wages as the men. Cultivating can be done by contract, and for men of capital is by no means a bad plan. Cultivating by contract costs—for ploughing, sowing, cutting, and threshing—about £2 5s. the first year, and £1 13s. after. The Mennonites do this kind of work cheaper and better than the Canadians. A Mennonite will break an acre of ground for 2½ dollars, while a Canadian charges 4 dollars.

PROVISIONS, MACHINERY, ETC.

Winnipeg is by no means a cheap place to live in, at present at least; tea, coffee, sugar, and meat are fully a third dearer than in Ontario. However, this will not be for long, and even now makes very little difference to the settler.

Farming implements are much dearer in Winnipeg than in Ontario. And I believe, in spite of what is said to the contrary, that it would pay the settler to bring the heavier articles of his outfit with him from Ontario.

I was, however, glad to hear that lately several houses have opened on the 'ready cash' system, and are selling much cheaper than the credit houses, as is but natural. But what pleased me most in the matter was that the farmers are nearly all taking advantage of them, which speaks well for the country.

DRAINAGE AND ROADS.

These two may well go together, for until the country is properly drained there can be no roads and the present tracks over the prairie have neither right nor title to the name. During fine weather they are uncommonly pleasant for travelling on, as the beaten soil becomes as hard as metal, but a single shower changes the aspect terribly, and the traveller finds himself floundering in a mass of black, sticky mud. This is a characteristic of Manitoba only; the North-West is much higher and drier, and requires little if any drainage, so that the tracks are always in fair condition. Manitoba, on the other hand, is rather low and wet, but there is very little of it that cannot be easily drained, and the Government are spending 100,000 dollars a year on drainage works; they are making deep cuttings all through the country, so the farmer can easily manage the rest by surface drainage; this must soon have a wonderful effect. Within the last twelve months the province of Manitoba has been divided into municipal divisions, and each division is bound to see after the proper maintenance of its roads and other public works.

SCHOOLS AND TAXES.

The taxes in Manitoba are so light that they are not worth mentioning; they do not amount to more than a few pence an acre. Schools here, as in Ontario, are supported by taxation; of course they are not yet very numerous, but they are quite adequate for the requirements of the country, and will, I am sure, be kept so.

PURCHASE AND DIVISION OF LAND.

The country is divided into belts, 5, 15, 20, and 50 miles wide on each side of the railway;

these belts are again divided into townships of 6 square miles each; these sections again are divided into quarter sections of 160 acres each. Two sections in each township are set apart for school purposes, and two belong to the Hudson's Bay Company. The sections are uniformly numbered from the south-easterly to the north-westerly angle, the odd-numbered sections in each township are railway lands, *i.e.*, lands to be sold to realise funds for the construction of the Canadian Pacific Railway, and the even-numbered sections are set apart for free homesteads and pre-emption lands. The lands are priced according to the belt in which they lie; in other words, their distance from the railway. In Belt A, the railway price is 20s.; in B, 16s.; in C, 12s.; D, 8s.; and E, 4s. per acre. The pre-emption price is generally half the railway price. Each settler who is either the head of a family, or a male over eighteen years of age, is entitled to 160 acres free, except for a fee of £2. He must have his name entered for it at the nearest land-office, and must reside on it for three years, and cultivate it to a reasonable extent, according to his means. He is allowed two months, which is counted part of the three years, after having his name entered, for moving his family on to the land. He can also be absent from his homestead six months out of each year. A second quarter section can be pre-empted, for which a fee of £2 has to be paid. No further payment is made till the end of the third year, when four-tenths of the price is required, after which payments at the rate of one-tenth each year for six years complete the purchase. Six per cent. interest is charged on the pre-emption money.

Emigrants are received in Manitoba by agents specially appointed for the purpose, who will advise and guide the settlers to the lands that may have been selected by them.

INSECT PESTS AND PRAIRIE FIRES.

I made particular inquiries concerning the grasshoppers when in Canada, and found that when they do visit the country vegetation simply disappears along their line of march. They have, however, only appeared five times within the last sixty years, and the settlers are confident that they have seen the last of them. One gentleman told me that they entered his drawing-room through the window and destroyed the lace curtains in it. By cultivation the eggs are destroyed, so that it is to be hoped the country will see them no more. Mosquitoes and black flies cause great annoyance, especially to the new-comer, during the summer months; but drainage, the great enemy of these pests, has been carried on to a great extent throughout the country, so that it is likely they will become less troublesome; they are not found in the towns, nor in the high dry parts of the country. Prairie fires are becoming much less frequent than formerly; however, numbers of them still occur every fall, doing considerable damage; but it is only the careless or over-confident farmer who suffers, as the means of protection are simple and are within the reach of all. The potato-bug has not yet made its appearance in Manitoba, but they expect it to do so; it seldom attacks potatoes planted in new land; they are not much afraid of it, and it has lost half its terrors best to those who know it.

CONCLUSION.

Two questions I was constantly asking myself while in Canada were: 1st. Why do the Canadians come to Ireland? If it be for the sake of scenery they are unwise, for, to use an expression of their own, their scenery 'whips ours all to bits.' If it be for the sake of comparison, that they may think more of their own country on their return, I can understand it. 2nd. Why do the Irish prefer hard work and misery at home to peace and plenty in that grand new world? I know that numbers of Irish do go to Canada, and that numbers of them succeed also, but what I mean is, why that number is not quadrupled, and why men of a class to whom success would not be a probability, but a certainty, *i.e.*, men who understand their business, and have a little capital, do not go out there. I could, if space permitted, give instance after instance of men who left Ireland paupers and are now well off, many of them rich; but is there need that I should do so? Where is the Irish family who has not some relative on the other side of the Atlantic, and that has not over and over again received that extremely pleasing proof of prosperity—a bank draft—from him? But these drafts, I am sorry to say, are oftener the fruit of work done for others than for themselves, for I was struck by the fact that the Irish seldom quit the large towns in which they have to work really hard for their wages, while they leave these rich lands to be occupied by English, Scotch, and German farmers, who quickly become independent and happy. This should not be so. If I am asked who ought to go to Manitoba and the North-West, I unhesitatingly say, any man who for any reason intends to emigrate to any place, and is not afraid of hard work and some discomfort for a few years, and whose family can get on for a time without the aid of female servants. Such a man will, if he has pluck, succeed in time, though he went without a penny, but if he has £100 or £200 in his pocket, he may expect to enjoy a prosperous and happy home in the immediate future. Anyone who cannot 'rough it,' or dislikes having his face blotched now and then by mosquito-bites, any 'ne'er-do-weel,' or drunkard, had better stay at home, or, for the benefit of humanity, drown himself on the way out, as he has no chance of succeeding.

I would have no one going to Manitoba too sanguine or expecting too much—this is a great

mistake, and very fruitful of disappointment. There are serious drawbacks to be encountered, many hardships and inconveniences to be endured, but none that a little pluck will not overcome, and none that will not be amply recompensed for by the comfort and independence to be gained by bearing them for a short season. There is an intensely cold winter, a hot summer, bad roads, mosquitoes, and black flies; grasshoppers occasionally, hail-storms in summer sometimes, a prairie fire in autumn, and perhaps a slight frost in spring; but, as a man said to me, when I enlarged on these disadvantages, 'I don't care a cent for them! I can live, and live well, in spite of them all.' And it is true; the rich soil, that with a little labour pours forth its abundance, is to be had for nothing. The climate is good for man, beast, and crops. This, the appearance of all three puts beyond question. The people are law-abiding and kind, the prices to be had for everything at present are very good, and it can be at most only a few years till the country is in direct communication with the home markets. Then indeed the settler will have just cause to congratulate himself on having chosen it as his home, for, as well as bringing him greater profit, it will bring him close to, I had almost said within call of, his friends in the old country—much closer than he would be in any other colony in the world.

I was greatly pleased to find that religious dissension is unknown in this favoured region, and indeed throughout Canada. The Canadians are a very religious but most tolerant people.

Anyone wishing for free-grant lands must go to the North-West, as those in Manitoba are all taken up; but he will be no loser by this, as the land is higher, drier, and just as rich; and 'cities' are springing up in every direction. Anyone, however, who has a particular fancy for Manitoba, can get plenty of land there for from five to ten dollars per acre. There are large tracts held by speculators who bought at low prices when the country was first opened, who are in many cases paying a high rate of interest on the purchase-money, and are, therefore, glad to sell at a fair profit. But no matter where he ultimately settles, there is one piece of advice I would strongly urge on every emigrant. Let him do nothing hastily. There are many interested parties who might lead him to make a purchase which, perhaps, would prove a disappointing one. The soil, surroundings, even the climate, are very varied, and great caution is therefore necessary in the selection of a location. A man should, if possible, spend six or eight months in the country, and go from place to place till he is satisfied. If he reaches Winnipeg in April, he will be able to get plenty of employment at good wages, and might work for some farmer for a month or so in each of the districts he determines to visit. At this time he will see the country in perhaps its worst state (but in my opinion, in the best for judging where to settle), *i.e.*, when the land is wet—every place looks well during summer and autumn when it is dry; but what a man wants to know is, what is dry in the spring. In the case of parties going out (and where at all practicable, I would advise a number to settle near each other, for the sake both of society and mutual aid), one man might go out and select a suitable locality—the others could follow. Of one thing I am certain: no man going out to the North-West determined to work, will be disappointed. Among the large number of settlers with whom I spoke, but three seemed discontented. They, I found, were town-bred, and had so little of the 'Mark Tapley' spirit in them, they would, I fear, be miserable wherever placed; and if presented with Manitoba, would expect a present of Ontario also.

For men who like sport, a visit to the North-West would be enjoyable. Some one calls it the 'Sportsman's Paradise;' and if innumerable prairie-chickens, ducks, plover, snipe, etc., etc., with an odd deer, elk, or bear for a change, can constitute it one, he spoke the truth. A shooting expedition to the North-West would be a comparatively cheap, and a very delightful, way for two or three friends to spend a holiday.

In Ontario the country is well settled and cultivated, and the farmer will have all the comforts of his old home, and others he could not have in this country; but then more capital is required and more skill is necessary.

One need not be a farmer, however, to get on well and live comfortably in Ontario. Men living on the interest of their money, and having children to educate, would find Ontario not only a pleasant but an economical place to live in. One could live there more comfortably on £200 per annum than in this country for double that sum, and get a higher rate of interest for his capital than at home. Besides, the educational advantages are exceptionally good.

Before closing this rather long account of Canada, I shall make one other remark. I consider the Canadian Government not only unfair to themselves but to this country in not bringing their country more prominently before the British public as a field for settlement. Everything being fairly stated—advantages and drawbacks—there can be no doubt that the former outnumber the latter—and I cannot help thinking that if fair samples of the various Canadian productions were sent over for exhibition at our agricultural shows, they would such 'a round unvarnish'd tale deliver' of the capabilities of the country, that many would be tempted to seek a home there.

THE REPORT OF MR. W. P. CUBITT,

Of Bacton Abbey, North Walsham, Norfolk.

HAVING recently had the pleasure of visiting Canada and Manitoba under an invitation from the Canadian Minister of Agriculture, I am asked to write a report of my travels through portions of that great country. First, I may be allowed briefly to allude to a difficulty under which I labour—that of having been preceded by so many practical and intelligent men, whose reports, and valuable statistics, of the previous year have taken so much ground from under me; and last, but not least, the exhaustive report of the Royal Commissioners, Mr. C. S. Read and Mr. Pell, M.P. I will, notwithstanding, endeavour to render this an original document; and, whilst noting from those who preceded me how generally pleasant was the voyage across the Atlantic, I find none touched upon the incidents of it.

I left the port of Liverpool on Thursday, September 19th, at six p.m., on board the good ship *Polynesian* of the Allan Line. We had 500 passengers of various nationalities—Germans, French, Norwegians, Americans, and Canadians, with many Irish, English, and Scotch, not forgetting Professor Hoffneyer and party from Cape Colony, and a passenger from New Zealand. The saloon passengers numbered about 150, and every berth was filled. Before coming on board, each one has a berth allotted to him, also a place at table, and printed lists containing the names of one's fellow-passengers are to be obtained in the saloon. The first dinner is a formal affair, but we soon become mutually acquainted. I may here state that the culinary arrangements are all that can be desired. Each meal is served with punctuality, and attended by an efficient staff of stewards. The amusements are music (pianoforte), concerts, reading, whist, chess, draughts, and other games, with deck promenading whenever the weather permitted.

At nine a.m. on the 27th sighted Bell Isle at the entrance of the Gulf of St. Lawrence. We approach within a short distance of the rocks, somewhat resembling the entrance to Bridlington Bay, on the coast of Yorkshire. These form the commencement of the Laurentian Group, running through the province of Quebec and Ontario to Lake Superior, at various distances from the St. Lawrence and the lakes. We are now getting clear of the ice, and running thirteen knots an hour in smooth water. In the evening our concert came off, and, having two professors of music and some good singers on board, it was a great success. Saturday morning at daylight we were in the midst of the Gulf, with no land in sight, but in the afternoon were running up the River St. Lawrence, the shores of which were dotted with the white cottages of the French Canadians. At sundown we arrived within a few miles of Quebec, but owing to a fog were obliged to bring up till the Sunday morning, when, after half an hour's sail, we reached our destination.

THE NEIGHBOURHOOD OF MONTREAL.

A special train awaited us, and we were quickly on our way to Montreal. We saw nothing of note till we reached the great Victoria Bridge, built by *our* Robert Stephenson, over the St. Lawrence. We stayed the night at Montreal, and on the following morning Judge Cross, a resident of the city, and one of our travelling companions from England, kindly sent his carriage to take myself and a brother-delegate from Ireland to the summit of Mount Royal, where we had a magnificent view of this fine city and the majestic St. Lawrence, flowing through the country as far as the eye could reach. We continued our drive, visiting some of the adjacent farms, and were particularly struck with the naturally good clay loams. The farming was far from being good; but there was a notable exception in the case of a Scotch farmer, whose land was clean, and who kept a good herd of Ayrshire cows, and had commenced the cultivation of roots. It was here we saw the dreaded Colorado beetle in its work of destruction; but its ravages can now be hindered by the application of Paris green, with which the leaves are sprinkled. The home of this beetle is in the United States rather than in Canada, and I did

not hear much of its ravages in my travels. The more striking characteristic of this neighbourhood was the apple-orchards, which were exceedingly productive, and this remark applies to almost every farm in Canada.

OTTAWA.

We next made our way to Ottawa, the capital of the Dominion, which is situated in a picturesque position on the banks of the Ottawa. On our arrival we called upon Mr. John Lowe, the Secretary of the Department of Agriculture, from whom we received passes for our intended journey to Ontario and Manitoba by railway and the lakes. An official was sent to show us over the Parliament buildings, which in design and style of architecture will rival Westminster. The Chandière Falls at Ottawa are well worth seeing; a portion of the water power is utilised in driving a large number of saw and flour mills. An immense lumber trade is carried on here, the stacks of sawn lumber, piled closely to the height of 20 feet, being said to cover 100 acres of ground.

THE DISTRICT OF PORT HOPE.

We then went on to Port Hope, where we were met, as arranged by Colonel Williams, M.P. for the East Durham County—a true type of an English country gentleman, and a passenger in the *Polynesian*—who had arranged to take us a trip across the Cavan district, for which purpose we were provided with a pair-horse 'democrat' (a light sort of waggonette carrying six or eight passengers). We passed through some good land, inspecting some of the farms and farmsteads on our way. The soil is a friable loam, about 30 inches in depth, resting upon disintegrated limestone. It produces excellent swedes, and grain of good quality, and just the land I should have liked in my own county; but from years of close cropping and limited manuring, it is not producing anything like the crops we are in the habit of growing. These farms run from 100 to 200 acres, and are, in almost every case, the property of the occupiers. Some of the oldest settlers are still living, who commenced clearing the forest fifty or sixty years ago, with scarce a shilling in their pockets, and are comparatively wealthy.

We called on one sturdy old Irishman eighty-three years of age, who had saved over 100,000 dollars (£20,000) and had commenced penniless. I could have filled my notebook with such cases. It was not capital these early pioneers then wanted, but strong arms and unflinching energy. It was perfectly marvellous to travel through this country and see what a vast area of forest has fallen before the axes of these hardy sons of toil. But the log-house and rough shanty are now being supplanted by neat brick dwellings, surrounded by verandahs and other signs of refinement. During the day, we lunched with Mr. George Campbell of Millbrook, then viewed his farm, which was clean and well cultivated. The few swedes that were grown were good, indeed, almost all the Dominion of Canada is more or less favourable to the production of roots, yet it is surprising how few are grown. Proceeding on our way we called at other farms, and then returned to Millbrook. The following morning, Colonel Williams took us for another drive through a good country along the shores of Lake Ontario: here I saw farms as good as any in England; but as usual, cultivated upon the whipping system—much grain with but few cattle. We returned to Port Hope. I could not but come to the conclusion that under a more liberal system of farming very nearly as much meat and grain could be produced as in our own country. We here took leave of our excellent and hospitable friend.

A SUCCESSFUL EMIGRANT FROM NORFOLK.

We next journeyed to Toronto, a well-built city, very English-like in the habits and manners of the people. I did not remain here long, as I was anxious to visit some old servants, who left my neighbourhood some forty-seven years ago to better their position, it being a period of great agricultural depression. This couple landed at Quebec after a six weeks' passage with but ten shillings in their pockets. Through many troubles and privations, they worked their way as far west as Garafraxa, about 600 miles from Quebec. After a hard struggle, in bringing up a family of twelve children (four of whom they have lost), they saved sufficient money to purchase 100 acres of forest, had a raising bee, and in one day felled and squared sufficient timber to build the walls of a log-hut. The roof is put on by more skilled hands. It is said these Canadian woodsmen are so clever, that with an axe, saw, and auger, they can build a house. Having erected this dwelling, my friend commenced cutting down the surrounding timber. "I watched" says the wife, "with much anxiety the felling of the first tree, lest it might fall on my house (as does sometimes happen) and destroy it." In the course of years, the farm was cleared, and the soil being rich, these good people ultimately succeeded, and within the last year have sold their farm and are now living in comparative comfort upon their hard-earned savings. Their sons have also been placed on farms, and their daughters are settled in life. This is but one out of many similar ones.

AGRICULTURAL COLLEGE AND MODEL FARM.

I started the following day with a buggy and pair of horses some twenty miles across country to the town of Guelph, where I visited the Model Farm and Agricultural College (supported by the Government of the Province), at which young men receive a practical as well as

scientific education in farming at a very trifling cost. I found both Mr. Mills (the president) and Mr. Brown (the manager) courteous and sensible men, well fitted for the positions they held. I was invited to go through the farm, and to criticise freely, making any suggestions that I might think desirable. I saw some excellent cattle, especially a Hereford bull. The sheep were also remarkably good. The roots were fairly planted, and good in size; but although the mangel seed was obtained from one of our crack London seedsmen, the bulbs were of various species, presenting a most irregular appearance. It was Mr. Brown's opinion that the cultivation of both mangel and swedes might be increased to advantage throughout the provinces, and that there would not be the difficulty, as had been represented to me, of getting them off before the advent of frost. Considerable alterations and additions were being made to the College Farm (for increased cattle and sheep accommodation) which, when complete, will render it one of the most valuable institutions of the Dominion.

ENORMOUS ROOTS.

I returned by rail to Toronto, which is surrounded by districts of great fertility, particularly towards the westward. In the township of Markham I passed some excellent land (clay loam) which, with draining and good farming, would grow first-rate crops of all descriptions. I believe Mr. Read went over the same land, and was driven by the same gentleman, Mr. Rennie, seedsman, Toronto. On his brother's farm they were busy selecting roots for the Markham show, the weights of which I carefully noted. I would here explain that the prizes are not given to the best farm or field of roots, but to individual specimens, to grow which unlimited space is allotted. The following weights were recorded:—Six long, red mangel, 213 lb., one of which was 54 lb.; two mammoth squash (a kind of pumpkin), 556 lb. The heaviest was 303 lb., and girth 8 ft. Six white carrots, taken from the regular field-crop, weighed over 4 lb. each. The general cultivation of this farm could not be surpassed—both ploughing and sowing were first-rate; indeed, Mr. Rennie wished me to state that he was willing to enter his brother and brother-in-law to compete in any all-England ploughing matches which might henceforth take place.

NIAGARA FALLS.—PEACH AND APPLE FARMING.

On my again returning to Toronto, I went to the Falls of Niagara. They quite equalled my expectations. One is not surprised at the immense volume of water when the fact is known that it is the outpouring of Lakes Erie, Huron, Michigan, and Superior into Lake Ontario, thence finding its way by the River St. Lawrence into the sea. Large quantities of peaches and apples are grown throughout Ontario, but it is in the neighbourhood of Niagara where they are cultivated in such luxuriance. Peach farming is very profitable. The trees are planted as in an apple-orchard, and when in full bearing net a clear profit of about £8 per acre. I was in company with a gentleman from Niagara who had 60 acres of his farm in peach cultivation.

THE TORONTO AGRICULTURAL SHOW.

I passed the next three days at the annual Toronto exhibition, where farming stock, implements, and manufactured fabrics were shown. The implements are of the lightest and most effective kind, and were all in motion, driven by machinery beneath the platform on which they were placed. I noticed a peculiarly constructed grass-cutter, the knife being driven without connecting-rods. I am not sufficiently mechanical to explain its construction, but it seemed most ingenious, and, if successful, must sooner or later come into general use. I think our agricultural mechanics might with advantage attend these shows. The cereals and root-crops were an excellent exhibit. The cattle in so young a country could not, of course, compare with those exhibited at our best English shows, but they were creditable. The Herefords, polled Angus, and Ayrshires were well represented from the Model Farm, but many were imported animals. The shorthorns from the same farm were of medium quality, but this was amply compensated for by those sent by the other breeders of the district. We also noticed a splendid white four-year-old shorthorn, which would have made his mark at either Birmingham or London. There were others of the same kind worthy to compete with him. We also noted a splendid white cow (pure shorthorn), and a grand grade red cow four years old, showing what can be done by crossing with pure shorthorns. There were also many specimens of younger cattle of considerable merit, but owing to the want of catalogues it was impossible to obtain the names of the owners and other desirable particulars. We saw a pair of beautiful cows, one bred by Cruikshank of Aberdeen (evidently of the Booth type), her companion a beautiful red (said to be imported by the States) of the Bates type, and a capital milker. Later on, large numbers of the polled Angus arrived, and there were good specimens of Canadian-bred Devons, they were of a larger size than those of our home-breeding, and this applies generally to the cattle bred in the Dominion. I cannot afford to devote more space to this class, but must not omit to say that I saw nothing to surpass, or even equal, the magnificent Hereford bull that Mr. Brown showed me at the Model Farm. The pigs were in large numbers, quite equal to the English breeds. Indeed, my companion, Mr. Christy, of Limerick, thought them generally better, and I noticed throughout the country that the swine were excellent.

The horses were not so well represented, excepting a few good imported Clydesdales. The Canadian cart-horse is rather an undersized animal, but has more breeding than our English cart-horse, and I can testify to its pluck, speed, and endurance. On the prairies you can see the men riding upon elevated seats, driving their horses abreast, in ploughs turning 14 and 16 inch furrows, at a pace which would astonish our country ploughmen. Indeed, it would do many of our men good to send them across the Atlantic, if only to be initiated in the art of moving, either on foot or otherwise. It has been found that the Canadian horses are much improved by crossing with our big English carriage-horses, which gives strength with the activity so desirable. We also saw admirable animals (from a cross with the Clydesdale) employed about the railways, breweries, and distilleries. Nor must I forget to mention the hack and harness horses, generally small, but surprising for their pace and endurance. Our English hacks are softer, and could not live with them in long journeys over heavy roads. I also saw many good carriage-horses and hunters.

There are fox-hounds in Toronto, but they run imaginary foxes over a trail; and if the hurdle-race at this show is any criterion of the power and speed of the horses and of the skill of the riders, I am sure the Toronto hunt would be in the leading ruck with the fastest pack we have in England. Some sixteen or twenty started in this, and raced (riders young and old) in scarlet uniform. 'They are off!' The young fellows make the running, taking stiff hurdles at full speed, clearing them in splendid style, and this on a hard road, round a grass-plat. Three of them keep the lead, and come in neck and neck.

In the centre of the show-ground, in a splendid building, was the exhibition of their home-made wares and fabrics. The latter were inferior to our English exhibits of the same class, but it must not be forgotten that Canada is only a young country as regards her manufactures. At the same time, I could not but think, if England manufactured for them a much better and cheaper article (to be free of duty), that it would be to the advantage of Canadians to apply their spare capital to the much-needed improvement of their style of agriculture; but more on this point shortly.

I had almost forgotten to mention the sheep classes. The downs were well represented, and took the lead in short wools; but the long-wools, especially the Cotswold and border Leicesters, were the favourites. Generally speaking, the sheep-breeding in Canada is behind that of cattle, and no doubt will remain so, the winters necessitating their being housed.

EXTRAORDINARY SUCCESS OF NORFOLK MEN IN TORONTO.

Before leaving the hospitable city of Toronto, I must say a word or two respecting it. Less than ninety years ago it was but an Indian village, surrounded by dense forests; and one would well-nigh conceive it to be a fairy tale when told that where the beaver gambolled in solitary streams rarely visited by white men, and where fever and ague reigned supreme, there has now arisen one of the healthiest and most handsome cities on the American continent, with a population (including suburbs) of over 80,000 souls! Many of its citizens hail from our own county, and some of them have risen to eminence and wealth. One instance in particular I cannot fail to mention, showing that even our quiet county of Norfolk has produced other men besides Nelson possessed with indomitable perseverance and courage. I allude to the firm of Gooderham and Worts. The former was born at Scole, and served as a soldier of the Royal York Rangers in the West Indies, where his regiment took part in the taking of Martinique and Guadaloupe. The latter was born in Great Yarmouth, and received part of his education at a dame's school in the village of Stalham. In the course of a few years Mr. Gooderham retired from the army; and in the meantime Mr. James Worts, who had married Mr. Gooderham's only sister, finding little could be done in the old country without capital, proceeded in 1831 to Canada, to select a home for both families. Arriving at Quebec, he travelled through Montreal, Kingston, Toronto, Hamilton, Niagara, and various other places, finally deciding on Toronto, and there commenced building a small windmill. The following year (1832) Mr. Gooderham sailed from London, bringing with him his own, Mr. Worts', and several other families, in all 54 souls, connected either by blood or marriage, arriving at Quebec all well after a six weeks' passage. Finding the windmill nearly completed, Mr. Gooderham united with Mr. Worts under the firm of Gooderham and Worts, doing a retail business within the city, which only then contained a population of three or four thousand. From this rather small beginning has grown a stupendous business. I regret that space will not allow me to follow the career of these wonderful men; but suffice it to say that, after a time, they commenced distilling, and now possess the largest distillery in the world. Their active season is from September to June, and the annual consumption is as follows: 500,000 bushels of maize, 100,000 bushels of rye, 50,000 bushels of barley, 25,000 bushels of oats, and 10 tons of hops; in other words, they absorb the annual produce of 31,500 acres of average land. The production of the establishment is on a scale as prodigious, being 8000 imperial gallons of spirit per day. To consume the refuse of this distillery, about 2500 bullocks are annually fattened in the cattle-sheds. These are the property of Messrs. Lumbers, Reeves, Shields, and Frankland, the well-known butchers, dealers, and drovers who have opened up the

cattle-trade with England. In addition to this distillery refuse, each animal has a liberal supply of hay. Messrs. Gooderham and Worts are also largely engaged in banking, being the chief proprietors of the Bank of Toronto, one of the most flourishing monetary institutions of the country. The Nipissing Railway is also largely owned by them, with no inconsiderable benefit to both citizens and agriculturists. Mr. Worts does not forget his native county, as many pictures in his mansion testify; nor is he forgetful of our old English sports, being himself master of the Toronto foxhounds. In connection with agriculture there are large maltings and breweries. One that I inspected is carried on by a company, under the management of Mr. David Walker, proprietor of the Walker Hotel. Both the malthouse and the brewery are splendid buildings, and their pale ale is scarcely surpassed by the Burton brewers; nor is this surprising, when such fine-coloured and thin-skinned barley is produced in the surrounding districts.

THE LAKES.—THE TRANSPORT OF WHEAT AND CATTLE.

I left Toronto by train to Sarnia, *en route* to Winnipeg, *vid* Lakes Huron and Superior, and had a splendid run of 800 miles. Towards the end of Lake Huron, the scenery is fine, especially at the narrow channel separating the islands of Manitoulin and Cockburn. We also passed a number of rocky islands, covered with dwarf pine, larch and fir. They rise abruptly from the lake, and are so close to each other as to afford but a narrow passage for vessels. Leaving Lake Huron we entered the river Sault St. Marie, (known as the Soo the pronunciation of Sault), dividing Canada from the States. Here are the rapids from Lake Superior, to avoid which we passed through a canal capable of floating vessels of considerable burthen; the rise of the locks being sixteen feet, bringing us to a level with Lake Superior. After 200 or 300 miles' sailing, we reached Thunder Bay, the proposed terminus of the Canadian Pacific Railway, which is to be the route for conveying grain and other produce from Manitoba and the North-West Territory, at least till such time as the contemplated line on the north of Lake Superior to Lake Nipissing be completed, the latter link being necessary to form a continuous line from the Atlantic to the Pacific. I may here state that when the line to Thunder Bay from Winnipeg is finished—in the year 1882, according to the contract—it is the opinion of Mr. Joseph Hickson, the general manager of the Grank Trunk Railway, also a large farmer and breeder, that wheat can be landed in London or Liverpool from Manitoba at from 32s. to 35s. per quarter, leaving a fair profit to both producer, merchant, and carrier. It is also the opinion of Mr. Hickson and others conversant with the trade, that a considerable profit has been realised upon cattle at the prices they have recently made in England. I take the following figures presented to me from reliable authorities: Bullock at Chicago, 1200 lb. live weight, at 4 cents per lb. (outside price), 48 dollars; conveyance by rail to seaboard, 6 dollars; conveyance to London or Liverpool, 25 dollars; total, 79 dollars, equal to £16 9s. 2d.; shrinkage and offal on 1200 lb., 440 lb.; thus leaving a balance of 760 lb., which at 7d. per lb. realises £22 3s. 4d., showing a profit (sinking the hide, etc.) of £5 14s. 2d., which compensates the importer for trouble, commission, and food, etc., during the voyage. In charging the cost of the animal 4 cents per lb. live weight, I ought to state that 3 cents is the more usual figure, save for animals of the very primest quality.

From Prince Arthur's landing we steamed to Duluth, a rough straggling town of some 2000 or 3000 inhabitants, whence a train takes us to Winnipeg; the first portion of the journey being of the most rugged description, after which we reached the Minnesota prairie, and travelled some 300 miles along a perfectly level surface. Portions of the land are being cultivated, but tens of thousands of acres are yet unbroken. Concluding a run of 1200 miles by rail and about 800 by lake we were in the city of Winnipeg, containing about 12,000 inhabitants. It has some good shops and public buildings, and the people seem to be driving a profitable trade. We took up our quarters at the Queen's Hotel; but the weather was wet and the country was not seen to advantage. For miles round Winnipeg and along the line of the Canadian Pacific it was, with few exceptions, wet and swampy, the season having been an exceptionally wet one. The soil, however, is rich, but will require thorough drainage before it can be successfully cultivated in such seasons. We drove out some twenty miles to Headingley to look over a farm of more than 2000 acres, belonging to the brothers Boyle, conveniently situated on the banks of the Assiniboine and a stream called Sturgeon Creek. This firm has opened an office at Winnipeg with the intention of looking after young men desirous of settling in the country. They will give them the benefit of their advice and experience, and thus prevent their being victimised by land-sharks, who have bought up large tracts of land on speculation in the hope of making fortunes at the expense of the emigrants. Messrs. Boyle intend taking pupils, for whom they will purchase land, and are open to act as buyers for other parties in England. We had the pleasure of crossing the Atlantic with Mr. Henry Boyle, on his way from New Zealand, and can recommend these young Englishmen to any requiring advice and assistance. Upon examination of their farm we found three feet of rich black soil before touching solid clay, but it struck us that thorough drainage would improve it very much. On our return to Winnipeg we found the mayor, the railway contractor, and other kind friends, had organised a shooting expedition, and took us the following day some 40 miles up the prairie for a day's sport among the wild-ducks

and prairie chickens, the majority of the party camping out for the night. Some of us, however, preferred returning to visit the Winnipeg show of grain and vegetables the day following. The wheat we saw was exceedingly fine, and is valued by millers far and near. Some of the swedes weighed over 22 lb. each, cabbages averaging 4½ feet in circumference, potatoes exceeding 2 lb. each, and squash 138 lb. There were also onions, carrots, parsnips, and other vegetables shown of considerable merit.

AN ACCOUNT OF DR. SUTHERLAND'S JOURNEY IN THE NORTH-WEST.

The day after we prepared for a journey of about 300 miles up the country as far as Turtle Mountain, intending to return by way of Pembina Mountain. We provided ourselves with all necessary camping equipage, including guns for duck and prairie birds; but finding the roads so bad and in places almost impassable from the heavy rains—owing to the exceptionally wet season, such a one not having been experienced for thirty years I was told—I only proceeded a day's drive beyond Portage la Prairie. I found around this place a good farming district, the land being much drier and more undulating. My friend and his companion pushed onwards, but I returned to Winnipeg, where I met with Mr. Fraser Rae, one of the *Times* correspondents, also the Lieutenant-Governor of the North-West Territory (Mr. Laird), from whom I received valuable information. I also gained much knowledge of the country from Dr. Sutherland, of Toronto, and a practical farmer from Niagara, the former of whom accompanied the latter in a journey of 1600 miles—the details of which are so interesting and so well authenticated by those who had travelled through the same district, that, in the interest of my readers, I give them verbatim:

'The route usually taken in journeys of this description is to enter the country by way of Manitoba, and proceed westward by one of the principal trails. For various reasons I reversed this course, entering the country through the Territory of Montana, at a point some fifty miles east of the Rocky Mountains, proceeding northward as far as the Saskatchewan River and then east and south-east for a thousand miles to Manitoba. The entire distance travelled in the North-West Territory, and Manitoba was about 1600 miles. I left Toronto on the 21st of June, and travelled by rail, *viâ* Chicago and St. Paul, to Bismarck, in Dakota. This part of the journey occupied less than four days. I then proceeded by steamer up the Missouri River to Fort Benton, in Montana Territory, a distance of 1200 miles, which occupied ten days. From this point the journey was made with horses and waggons. The distance from Benton to the international boundary line (United States territory), by the trail usually followed, is reckoned at about 275 miles. The country is a vast treeless prairie, with a hard and somewhat arid soil, much of it strongly impregnated with alkali, which also taints the waters in the streams and pools. The herbage is short and rather scanty, and seems to indicate an insufficient rainfall. There are said to be vast tracts in Montana suitable for both stock-raising and agriculture; but certainly such is not the character of that part of the territory through which I passed. When we reached the international boundary line (Canada), change for the better was at once observed. The water was more abundant and of better quality, the pasturage rich and plentiful, and instead of the short dry grass of the Montana plains, vetches of excellent quality became abundant. The valley of Milk River, which we forded soon after crossing the boundary line, struck me as a good location for stock-raising, at least in so far as pasturage and water are concerned; but as there is an entire absence of timber, as there are no deep valleys, it probably would not afford the shelter for stock which is desirable during the winter season. I have no doubt, however, that abundant shelter could be found fifty or sixty miles westward, among the foothills of the Rocky Mountains. Experiment alone can prove whether agriculture can be successfully followed in this region. The chief drawback to stock-raising is the nearness of Milk River to the boundary line, and the consequent danger of raids by American Indians.

'As we proceeded northward there was a steady improvement in the quality of the soil, as shown by the rich and luxuriant vegetation, and this continued, with but little intermission, all the way to the North Saskatchewan, a distance from the boundary line of some 400 miles by the trail. In fact, throughout this entire region there is scarcely an acre that could not be utilised either for farming or stock-raising. And even in those parts of the country where it would be necessary to house the stock during winter, hay is so abundant that a sufficient supply could be obtained at a trifling cost.

'After passing Fort McLeod (about 500 miles in a direct line from the boundary) our course lay parallel with the Porcupine Hills, and a short distance to the east of the range. Here also we found magnificent stretches of rich prairie waiting for the plough; and I was informed on good authority that between the Porcupine Hills and the Rocky Mountains there is a tract of country, say, speaking roughly, 60 to 100 miles in extent, which for stock-raising is unsurpassed on the Continent, and which, it is believed, would be found equally valuable for agriculture.

'Some eighty miles north of Fort McLeod we crossed Sheep Creek, on the banks of which we found the richest soil and the most luxuriant pasturage that we had met with up to that point. Not only on the level bottoms of the valley, but over the hills to the north, the rich black soil was of great depth, and where thrown up by the badgers, was as mellow as the soil of a thoroughly worked garden. Timber also, is found on the banks of this stream, not in large quantities, but

sufficient for building and fencing purposes. Whether the seasons will admit of successful agriculture, remains to be seen; but as far as soil and water are concerned, a more attractive location could not be desired.

'For stock-raising purposes, however, by far the best region I visited is the valley of the Bow River. This stream issues from the Rocky Mountains, about 160 miles, in a direct line north of the international boundary. It flows with a strong current in a south-easterly direction, and enters the south branch of the Saskatchewan River, about 120 miles east of the mountains. In the wide valley of the Bow, and on the adjacent hills, there is an inexhaustible supply of the richest pasture; the water both in the river and its numerous tributaries is abundant, and of the best quality; the deep valleys, especially on the upper waters, afford excellent protection during cold weather; and I am assured by those who have been long in the country, that the winters are so mild that the cattle can be left to run at large with perfect safety, and will be found in good condition in the spring. Thus far, farming has been tried only on a limited scale; but enough has been done to demonstrate the richness of the soil, and to show that wheat, barley, oats, and the various vegetables can be grown successfully.

'From Fort Calgarry on Bow River to the crossing at Elk River, a distance of 100 miles, the country consists chiefly of rolling prairie, much of the soil being of good quality. From Elk River to Edmonton on the North Saskatchewan, there is a considerable growth of poplar, with stretches of open prairie between, the soil being rich and well adapted for farming purposes. In this region the winter is too cold to admit of cattle being left unprotected; but the supply of natural hay is abundant.

'Of the country from Edmonton eastward to Fort Carleton, a distance of some 500 miles, I cannot speak in positive terms, as my journey was made by skiff down the river, and hence I had no opportunity of examining the quality of the soil or the general features of the country except in immediate proximity to the stream; but at certain points where we landed, such as Fort Pitt and Battleford, we found that barley produced a good harvest, and that the various kinds of garden vegetables, even the more tender sorts, grew luxuriantly.

'The next locality that I examined with any degree of care is known as the Prince Albert Settlement. It lies at the confluence of the north and south branches of the Saskatchewan, and extends up the south bank of the former stream for some 40 miles. It is about 200 miles north of the latitude of Winnipeg, and is distant from the latter place, by the usual trail, about 550 miles in a north-westerly direction. The soil throughout the settlement is good; but the past summer has been unusually wet, and in some cases the crops were touched by early frosts before they were fully matured.

'The country lying between the crossing of the South Saskatchewan and the western boundary of the province of Manitoba I need not describe in detail. Suffice it to say at present that with the exception of an alkali plain of considerable extent, the land is of good quality. We passed through some beautiful plains, where signs of successful farming were already apparent. The portions deserving of especial mention lie between Fort Ellice, on the Assiniboine river, and the western boundary of Manitoba.

'As these notes may meet the eye of some one contemplating a similar journey, some hints as to outfit and mode of travel may not be devoid of interest. For two persons going by the route already indicated, the following may be considered indispensable:—A good "Buckboard," which is the best vehicle for prairie travel; a pair of native horses, which can usually be purchased at Benton, at prices ranging from 50 to 100 dollars each; a cart or spring waggon to carry camping apparatus, with one or two horses for the same; several spare horses, as on such a journey some may get sick or be lost; one or two competent men to act as guides, look after the horses, find suitable camping-places, cook, etc., etc.; a tent, blankets, and pillows (a rubber blanket indispensable), camping-box containing a few dishes ("granite ironware" are the best), receptacles for tea, sugar, etc., an axe, spare rope, etc., etc., and a store of provisions sufficient to last for at least a fortnight, or until the traveller can reach the next place where supplies may be obtained. As to clothing, provision should be made for cold nights and rainy days. Stout tweed for the outer garments is best. A pair of stout riding-boots, and water-proof coat and cap, will be found useful. A breech-loader gun, revolver, and hunting-knife should also be carried.

'In travelling, the usual custom is to start very early in the morning, drive for two or three hours, light fire, and halt for breakfast, and allow the horses to feed and rest for at least two hours. Then drive for, say, three hours more, another rest, and then drive till it is time to camp for the night. The sole food of the native horses is the grass of the prairie, and it seems to be all they need. On the route from Benton to Edmonton there are numerous rivers to be crossed. None of these are bridged, but one or two have ferries, and on one or two more boats can be obtained. At certain seasons some of these rivers can be forded, but at other seasons this is impossible. The usual way, when reaching a stream the depth of which is unknown, is for some one to mount a horse and try for a ford. If a practicable crossing is found, the vehicles are driven across; but if not, a temporary boat or raft has to be constructed, on which waggons and their contents are ferried over, while the horses are made to swim to the other side. Crossing some of these streams is attended with a good deal of danger, and can only be managed successfully by those who have had experience in such matters.'

THE PROSPECTS OF CULTIVATION IN THIS TERRITORY.

I further obtained much information from Donald A. Smith, Esq., formerly resident Governor of the Hudson's Bay Company, and for several years one of the representatives for Manitoba in the Dominion Parliament. He says—'Manitoba proper contains an area of about 9,000,000 acres available for agricultural purposes. The North-West Territory, in connection with Manitoba, extending from the Rocky Mountains eastward and from the international boundary on the south to fifty-six or fifty-seven degrees north latitude, contains considerably over 100,000,000 acres, by far the larger portion of which are believed to be well suited for the production of wheat and other grain. The northern portion, known as the Peace River district, owing to the depression at that point of the Rocky Mountains, is quite equal in climate to the more southern part. These immense territories, in the course of a very few years, will undoubtedly be under cultivation, as a main railway is being constructed—with several branch lines—to connect the Canadian system of railways with the Pacific coast. When this arrangement is complete, a prodigious amount of wheat and other grain will be exported. Even now it is computed that wheat in those provinces can already be grown at a cost not exceeding 40 cents, or 1s. 8d. per bushel. The quality is very fine, and will make superior flour; indeed, it is eagerly selected by the millers of the Western States.'

USEFUL ADVICE TO FRESH COLONISTS.

Having thus given the opinion of men so thoroughly and practically acquainted with these immense provinces, I venture to make a few remarks of my own on so important a topic. Whilst acknowledging the natural fertility of the soil of Manitoba and the North-West territories, I am constrained to say that it will not be possible to colonise them rapidly, especially by those who have long enjoyed the civilisation and comforts of England, until they become more opened by railway communication. The men to face such a country should be young and hardy, with any amount of pluck and perseverance. Many such are already there and are very hopeful of the future, but I think there is misapprehension as to the capital required. It has been said that a man may fairly start upon a section of 160 acres with a capital of less than £150. In my opinion much more than that amount will be necessary. Shelter will be required for himself and cattle, and also food for the first year. To start with but one pair of oxen is a slow beginning; still, many are trying it. Capital is needed in Manitoba as elsewhere, and the more one has the sooner he will make money. For instance, if a man start with about £2000 he could purchase and bring rapidly into cultivation 800 or 1000 acres, providing himself with a house, and his cattle with necessary shelter. He should depend on stock paying as much as his tillage and crops, and might start with a strong herd of young, growing cattle, or commence breeding them. Good working oxen are worth £20 per pair, and in three years will be growing into big animals. They must be sheltered during winter, but no elaborate buildings are required, simple sheds of rough timber being sufficient. Any quantity of prairie hay may be had for the mowing, and summer food gratis for years to come. The straw should not be burned, as is now customary; but stacked round the cattle-sheds for warmth and bedding, preserving the manure till such time as the soil requires it I do not believe in the too general American plan of taking all out of the soil, and putting little or nothing back. The one system leads to ultimate poverty, the other to wealth. In respect to the free grants of lands and purchase of additional quantities, all particulars may be obtained from the Government agents. But a word of caution is necessary to the inexperienced, viz.: they must by no means buy wet or swampy land, much of which is to be found in the neighbourhood of Winnipeg. Further westward there are millions of acres of dry rolling prairie to be had at nominal prices, indeed 160 acres can be had free of cost by any *bonâ fide* settler. So great has been the fever of speculation in Manitoba that thousands of acres have changed hands without having been seen by buyer or seller. I found for miles beyond Winnipeg the land has nearly all been taken up, and is still held by speculators; but, in my opinion, a collapse is not far distant, it being impossible that these wet soils can be thoroughly utilised in wet seasons till they are thoroughly drained, Many there have an idea that drainage is but a simple affair, only costing a few shillings per acre, whereas such drainage as is here required would seem to me to cost in some cases some £10 per acre, as it involves the expense of cutting a great many dykes, intersected with pipes and drains, as practised both in Holland and parts of England. It is said that the Government intends doing this, but it cannot be supposed they will spend money to benefit these speculators and landsharks, who are fictitiously increasing the value of the soil, to the hindrance of legitimate purchasers. Perhaps it might be wise legislation to compel *bonâ fide* speculators to pay cash for their land, which should be forthwith subject to the same rates and taxes as that already in cultivation; but I think a rod is already in pickle for these gentlemen. I have thus fearlessly given my views, which may be taken for what they are worth. Land in the neighbourhood can be bought at from 2 to 10 dollars per acre. This country has undoubtedly a great future before it, but it is desirable that all should see for themselves before choosing a final settlement. While speaking of emigration I feel constrained to say that the arrangements at Toronto (which I understand are similar to those at other places) for dealing with emigrants, are all that could be desired. They are well looked after, and the food and

accommodation are good. I cannot pass from this subject without expressing my obligations to Mr. Donaldson, the immigration agent at Toronto, and Mr. Hespeler, the agent at Winnipeg, for the kind assistance they rendered me in the prosecution of my inquiries.

My return was through a portion of the United States, making short stays in the various towns through which the rail passes. While passing through the State of Minnesota, I noticed that the subsoil was not so good as in Manitoba—so far as I could see from an examination of the cuttings along the railway—and I do not think this part of the States so well adapted for wheat-growing as the Canadian Territory. The agents of the American railway companies are very energetic in their endeavours to sell their lands, and do their utmost to divert settlers going to Canada; but instead of listening to them, people should make their way to their destination and see the British lands for themselves. It is also said by Americans that large numbers of Canadians are leaving their country and settling in the States, but I did not find this to be the case. I passed by St. Paul's and Milwaukee, and stayed two days in Chicago, one of the most extraordinary business cities in the world.

CANADIAN CHARACTERISTICS: FARMERS AND CATTLE RAISING, ETC.

I was not prepared to find it a country of such an enormous area, whose inland seas could easily swallow up the British Isles. These waters abound with fish of various kinds, and the navigable rivers afford the cheapest transport for the produce of the land. There is every facility for its becoming a great trading nation. From the mouth of the St. Lawrence *viâ* lakes and rivers its water communication extends beyond 2000 miles, whilst the traveller may proceed by land from the Atlantic to the Pacific, including Manitoba and the North-West Territory, a distance exceeding 3000 miles. Its climate is too well-known to need any description. Suffice it to say, I found the autumn most lovely. The people, in habits and manners, much resemble the English; they are charitable, kind, and hospitable. It is a genuine hospitality, and there is no apologising—if one by chance looks in—that they have nothing better to offer, but a true Canadian welcome to the best the house affords. Agriculturally speaking, the soil, as in most other big countries, is of good, bad, and indifferent qualities, but with a large proportion of the good. It is with regret that I cannot speak well of the general cultivation. In a former portion of this report I alluded to many of the early pioneers who had grown comparatively rich. They were those who had, some fifty or sixty years ago, selected the richest lands from amongst the forests, and by almost superhuman labour and economy realised a competency. But good as the soil may be, the consecutive cereal cropping must tell its tale. Everything taken off, and nothing added to, will deteriorate the best land in the world. To a great extent this has been the course pursued through a part of the Dominion. The younger men have more or less followed in the steps of their fathers, and the results need not be told—the farmers are not so well off as they might have been had they farmed in a different manner. Hence the desire of so many to sell and go westward or elsewhere, and, by the way, no class of men are so calculated as these native Canadians to open out a new country. Brought up from boyhood to habits of strict industry, hardy, athletic, and skilled in the use of tools, but few Englishmen can compete with them. In telling my brother farmers that previously to the introduction of reaping-machines, it was not uncommon for some of these men to cradle (that is, to mow with a long scythe with a cradle attached) five acres of fair standing wheat between sunrise and sunset, they may well express surprise. It seemed at first incredible to me, but I found hundreds could testify to the fact. But how is it these industrious men are drifting into difficulties? It is from the continued system of grain cropping, and the absence of root culture, which would enable them to feed more cattle, and convert their straw into valuable manure; and whilst so much good clay-loam abounds—and other land with a strong subsoil—why is it more land is not laid down to permanent pasture, thus lessening the cost of tillage, especially as labour is so scarce and dear? Single men are mostly employed as labourers, and they are boarded in the farm-houses. If there were more cottages scattered through the agricultural districts as homes for married men, a resident peasantry might be established, so much more reliable than this nomadic labour, and recuperative withal. The farmers say, What are we to do with men in winter? I say, with so much of their land so well adapted for root-culture, they should go in for beef-raising by stall-feeding. I do not, however, wish it to be understood that I am passing a sweeping condemnation upon all the Ontario farmers or farming. Far from it; for I had the pleasure of visiting many farms especially on those rich soils west of Toronto, where agriculturists were quite alive to the necessity of cattle-raising and feeding, and are making great strides in that direction. But these were not the men desirous of selling their farms. It is scarcely necessary for me to say that these remarks do not apply to Manitoba and the North-West Territory. Farmers going into the latter provinces, where the soil is virgin, need not follow the unwise system pursued in the older parts of Canada, and there is no reason why they should not succeed, if they are not afraid of hard work, and are possessed of some capital.

The following is a conversation I had in the Toronto cattle-yards with Messrs. Franklin and Co., butchers, packers, and cattle exporters to England. In looking over the bullocks they were preparing for shipment, they informed me that during the previous four weeks they had pur-

GREAT CIRCLE, OR AIR LINE DISTANCES, IN GEOGRAPHICAL MILES.

Yokohama (JAPAN)	to	Port Simpson	3865
... do ... do	"	Port Moody (Burrard Inlet)	4374
... do ... do	"	San Francisco	4470
San Francisco	"	New York	2228
do ... do	"	Montreal	2202
Burrard Inlet	"	do	1902
Port Simpson	"	do	2194
St. Johns (Nfld)	"	Cape Clear	1670
... do ... do	"	Tory Island	1693
Montreal	"	Quebec (River St. Lawrence)	139
... do	"	Cape Race (*vid* St. Paul)	1007
... do	"	Belle Isle	886
Belle Isle	"	Tory Island	1657
Cape Race	"	do do	1736
do ... do	"	Cape Clear	1708
Tory Island	"	Liverpool	240
Cape Clear	"	do	310
Halifax	"	Cape Race	470
Portland	"	do do	767
Boston	"	do do	808
New York	"	do do	1010
do ... do	"	Liverpool (south course)	3052
Fort York	"	do (*vid* Hudson Strait and Rathlin Island)	2941

105 100

MAP OF THE
DOMINION OF
CANADA,
SHEWING THE EXTENT AND SITUATION OF ITS
PUBLIC LANDS,
ALSO ITS GEOGRAPHICAL RELATION TO THE
BRITISH ISLES.
Published by order of
THE HON.ble THE MINISTER OF THE INTERIOR
1880
GREAT CIRCLE, OR AIR LINE DISTANCES, IN GEOGRAPHICAL MILES.
Yokohama (JAPAN) to Port Simpson 3865
do do " Port Moody (Burrard Inlet) 4274
do do San Francisco 4470
San Francisco " New York 2528
do do " Montreal 2910
Burrard Inlet " do 2994
Port Simpson " do 2165
St. Johns (Nfld.) " Cape Clear 1670
do do " Tory Island 1060
Montreal " Quebec (River St. Lawrence) 129
do " Cape Race (old St. Paul) 1067
do " Belle Isle 880
Belle Isle " Tory Island 1052
Cape Race " do do 1736
do do " Cape Clear 1706
Tory Island " Liverpool 360
Cape Clear do 310
Halifax " Cape Race 476
Portland do do 1079
Boston do do 738
New York do do 1057
do do " Liverpool (south course) 2 59
Fort York do (via Hudson Strait and Rathlin Island) 2541
Longitude West 65 from Greenwich.
PACIFIC OCEAN
ATLANTIC OCEAN
NORTH
BRITISH
ISLES
ICELAND
GREENLAND
BAFFIN BAY
DAVIS STRAIT
HUDSON BAY
HUDSON STRAIT
NEWFOUNDLAND
GULF OF ST LAWRENCE
NOVA SCOTIA
NEW BRUNSWICK
PRINCE EDWARD ISLAND
CAPE BRETON
LAKE SUPERIOR
LAKE WINNIPEG
LAKE WINNIPEGOSIS
LAKE MANITOBA
LAKE OF THE WOODS
LAKE ATHABASCA
LAKE ST JOHN
LAKE ONTARIO
LAKE ERIE
LAKE MICHIGAN
LAKE HURON
GULF STREAM
Melville Sound
Cockburn Island
Gulf of Boothia
Fox Channel
Southampton I.
James Bay
Hudson Bay
Davis Strait
Baffin Bay
Greenland
Iceland
Newfoundland
Gulf of St Lawrence
Nova Scotia
New Brunswick
Prince Edward Island
Cape Breton
Lake Superior
Lake Winnipeg
Lake Manitoba
Lake of the Woods
Lake Athabasca
Lake St John
Lake Ontario
Lake Erie
Lake Michigan
Lake Huron
Gulf Stream
Vancouver Island
Queen Charlotte Islands
Columbia River
Fraser River
Saskatchewan
Nelson R.
Missouri River
Mississippi
Central Pacific Rail Road
Canadian Pacific Railway
Hudson Bay Railway
Quebec
Montreal
Ottawa
Toronto
Kingston
Halifax
St Johns
Cape Race
Cape Clear
Tory Island
Liverpool
Belle Isle
Port Simpson
Port Moody
San Francisco
New York
Portland
Boston
Fort York
Yokohama
UNITED STATES
NORTH WEST TERRITORIES
DOMINION OF CANADA
BRITISH COLUMBIA
MANITOBA
ONTARIO
QUEBEC
ENGLAND
WALES
SCOTLAND
IRELAND
ENGLISH CHANNEL
IRISH SEA

chased over 2,000 head from the farmers in the township of Lobo, within twenty miles of London (Canada), a district noticed for its rich grass, the soil being clay-loam. These cattle were brought from farms of from 100 to 200 acres, each farm feeding from thirty to seventy head. They were bought by the owners in a lean state at from £8 to £9 each, and sold off the grass at from £13 to £16 per head. Much of the land in the western part of Ontario can be devoted to grazing purposes. The principal feeders during winter are located in the counties of Wellington, Guelph, Elora, Fergus, Galt, Waterloo, and the adjoining neighbourhoods. They agreed with me that if cattle were supplied with a fair amount of linseed cake, both on the grass and in the folds, it would be profitable to the farmer. They added: 'But it must be borne in mind that the export trade is only of recent date. Five years ago only a thousand head had been shipped to Great Britain. Our markets previously had been Albany, Boston, and New York; but the outrageous duty of 20 per cent. laid upon us by the Americans for all live stock, and their own increasing supplies, prevented the trade proving very remunerative, and farmers received no encouragement. But now that they have an assured market in England the improvement has been rapid, and we are yearly increasing our exports. The improved price, together with the demand, has caused our farmers to take a deeper interest in their stock; and the Canadian Government have established an Agricultural Commission, which will do a great deal of good and furnish information of such a character that must result in greater zeal. We have the best-blooded animals in Canada, and with strict attention and more liberality in feeding, need be second to none in the world.' It will thus be seen that Messrs. Franklin coincide with me in the fact that raising more cattle must henceforth be the paramount object of Canadian farmers, that is, if they wish to improve their position. It is lamentable that in so fine a country—the greater portion of the soil of which is equal to anything on this side of the Atlantic—so many farmers should be anxious to dispose of their land which, with more liberal treatment, would amply repay for increased outlay. If the necessary capital can be obtained, there is no excuse for niggardly farming. With good roots, abundant hay, cheap corn, and linseed cake of the finest quality to be had in the country at such reasonable rates, with miller's offal to be obtained at nominal prices, and bran, which possesses so many nutritive properties, selling at less than six cents per stone, there can be no excuse for farmers not keeping more stock upon their farms. If the English land were cultivated upon so penurious a principle general bankruptcy would be the result. Here a man with 100 acres in tillage would be expected to stall-feed from twenty-five to thirty-five bullocks, upon each of which he would spend some £5 or £6 per head (in addition to roots) upon artificial feeding. It is not surprising that with such farming in Canada so much land should be for sale in Ontario, and now offering at prices ranging from £10 to £15 per acre, which cost the early pioneer little or nothing. In favoured localities it might perhaps command higher rates, but present prospects would seem to denote a further reduction. It may be asked if the purchase of such land would not be a fair speculation for English farmers. My reply must be in the affirmative, provided that two or three occupations could be laid together. In Canada, farms are occasionally rented at from two to five dollars per acre, but they are neither subject to tithe nor poor-rate. From 1s. to 2s. per acre would cover educational and other charges. Connected with the question of tithes is the fact that poor as Canada is in comparison with England, her people build churches (many Episcopalian), and pay their own ministers; nor can a stranger travelling through any of her country districts fail to notice that her people have more reverence for religion and more loyalty to their sovereign than the inhabitants of many older countries. After a most enjoyable and instructive visit, of which I shall long retain pleasing recollections, I took my leave of Canada, and embarked on board the Allan steamship *Sardinian* on Saturday, October 9th.

THE RETURN VOYAGE.

Our return voyage was all that could be desired, and, barring a delay of eight hours during a fog off Belle Isle, we ran, according to log, an average of 300 miles daily, arriving in Liverpool at two p.m. on Monday, October 18th. We only brought home about fifty saloon passengers, amongst whom were Sir Hugh Allan, the principal owner of the Allan Line, and Bishop Toke of the Reformed National Church. Another of our passengers was Miss Annie Macpherson of Spitalfields, London, who interested me in her work among the perishing children of that great city. During the past ten years she has rescued and trained several thousands of children, and has crossed the ocean twenty-four times. On an average 250 children have gone with her to her Farm Home at Galt, Ontario, where they remain till proper situations are found them. Many a sorrowful story of desertion fills her heart; orphans and others thrown upon the streets by the inhumanity of drunken parents. She assured me that Canada had been a God-opened way for these waifs, and that 98 out of every 100 were doing well. They are principally placed with farmers, who agree to keep them, giving them board and lodging and six months' schooling each year. They get 25 dollars for their services, with an annual increase; so that at seventeen or eigheen young men are able to hire themselves out at good wages. Ten pounds enables Miss Macpherson to rescue another life and give it a start in Canada. May God speed the work!

THE REPORT OF MR. PETER IMRIE.

Of Cawder-Cuilt, Maryhill, Lanark.

THE first remark it occurs to me to make to such as may be thinking of emigrating to Canada is that the voyage across the Atlantic (at least in an Allan Line steamship) is entirely pleasant. In the saloon you have a high degree of luxury, in the intermediate cabin a considerable degree of comfort, and in the steerage very tolerable accommodation, with plenty of good plain food. I made it a point to look into these matters for myself, and also conversed with the different classes of passengers on the subject.

But I fancy there will be few emigrants of any class who will consider themselves at the end of their journey when they leave their Atlantic liner at Point Levi. There is nothing to attract the emigrant, or at all events the agricultural emigrant, in the neighbourhood of Point Levi, I fancy many a one might do worse than take a look at the Eastern Townships of the Province of Quebec, before proceeding further westward. These townships are easily reached by Grand Trunk Railway from Point Levi, *vid* Richmond and Sherbrooke, the last named town being the capital of the Townships, and situated at the junction of the railways running eastward through the new settlements of Scotstown and Lake Meganic and south-east to the United States, through the older settlements of Compton, Eaton, Stanstedd, etc., etc.

Government land in the Eastern Townships is to be had at 60 cents per acre. It is all dense forest; and in many sections the roads are few, and bad and far between. I could not recommend any emigrant from Scotland to go in for these lands. Better buy a partially improved lot. Such may be had in any district at little more than the 60 cents per acre, *plus* actual cost of improvements effected. Of such improvements the first is that of road making, the cost of which is laid upon all adjoining lands in the form of a tax. But the most important, of course, is the cutting down and burning of the timber, or of such portion of it as may not be worth saving. Unless in unfavourably situated localities, I believe it pays to market all the cedar, pine, and spruce that may be upon these lands, and perhaps one or two varieties besides these; but all the other wood (and that will be the great bulk of forest in most cases) is fit for nothing but the flames. If near a large town, however, such as Sherbrooke, portions of the otherwise useless wood may be sold at fairly remunerative rates as fire-wood. In fact, in a very cold winter I understand any industrious man may make 2 dollars 3 cents per day of clear profit at this work, and if he employ men besides himself his profits may, of course, be relatively increased. But rough or forest land in such favoured localities cannot be purchased under 6 dollars an acre, or thereabouts. The cost of cutting and burning the wood, so as to leave the land fit for ploughing, varies somewhat according to circumstances, but I believe may be set down generally at about 15 dollars per acre. Of course the stumps are left in the ground for several years, to allow them the necessary time to die and grow easy of removal.

After the cutting and burning of the wood is done with, and any large stones removed, it is usual to plough the land roughly, and to take off a crop of wheat or potatoes, or both, afterwards sowing down for hay or pasture, in which state it will remain until the stumps are ready for removal. Now, as already remarked, the cost of bringing the forest land to a state of readiness for this course of cropping may be set down at 15 dollars per acre. There are plenty of Frenchmen and others who are clever at using the axe, and at all the other processes in forest clearing, who will do the work by contract at the figure named, or even less; and the first crop of wheat, manured with the ashes of the burnt forest, may, I am told, be reckoned upon to yield 20 or 25 bushels per acre, notwithstanding the presence of the stumps. With a fairly good market, it is considered that this crop alone should very nearly pay the cost of clearing, thus leaving the farmer with a piece of really good grazing land, at a price which can never be high, and which, I fancy, must in many cases be merely nominal. When the time comes for extracting the stumps, say in six or seven years, there will of course be a considerable outlay of capital necessary for the performance of that operation. Of course the amount will depend very much on the nature of the soil, and very much also on the number and character of the stumps. Six dollars

THE ALLEGED EMIGRATION FROM CANADA TO THE UNITED STATES.—The reports circulated a short time ago, respecting an alleged wholesale emigration from Canada to the United States, have recently formed the subject of an enquiry by the Dominion Government, and the discussion that has taken place in the House of Commons at Ottawa on the matter proves conclusively that the absurd story of what was called the Canadian exodus is without any foundation in fact. The evidence collected by the Department of Agriculture shows that for the year ending June 30th, 1880, the passengers by the Grand Trunk Railway from Canada to all points west, including Manitoba, numbered 30,626, and those from the Western States to Canada 24,739, a difference of 5,887. By the Great Western Railway the total number of passengers from Canada to the Western States and Manitoba was 1,719, and from the Western States to Canada 1,262; difference 457. The United States Consul at Sarnia has entries of 700 emigrants' certificates, which, with an average of 4½ persons per certificate, represents 3,150. In considering these figures it must be remembered that a large number of Emigrants from Europe to the Western States of America travel through Canadian Territory to their destination, and that at present the only route by which intending settlers can reach Manitoba and the North-West Territory ~~from the Canadian~~ ports is by means of the United States Railways, so that persons coming under either of these categories cannot be classed as Emigrants from Canada to the United States, although this has hitherto been the practice. It is however expected that next year the Canadian Pacific Railway from Thunder Bay to Winnipeg, and upwards of two hundred miles beyond, will be opened, enabling passengers to reach Manitoba without being obliged, as they are now, to pass through the United States. The following is the concluding paragraph of the report that has been made on the subject: "It appears that, whatever test "is applied—whether the well-known and recorded capacity of the cars employed, "or the inability of counting by the methods applied, or the number of all "passengers travelling by rail, as officially obtained from the responsible officers "of the railways, or the entries with emigrants' effects, or approximation by "the records of the census—the claim of the Collector of the Port Huron "Custom House, as respects the immigration into the United States "at that point, is a fabrication so gross as to establish an impossibility without "even a semblance of probability." There is also another side of the question. It is mentioned in the Report that since 1873 the immigration into Canada from the United States largely exceeded 10,000 per annum, that being the average number of entries with settlers' effects alone (one entry frequently covering a whole family), and besides it is estimated that the immigrants into Canada from the United States without effects, and of whom there is no account, may be considered as equal in number to those who are recorded.

The Oath of Allegiance required by the Constitution of the United States having been referred to in some of the preceding Reports, the following information is appended:—

Canada, being a part of the British Empire, the emigrant from the United Kingdom to any of the Provinces or Territories of the Dominion of Canada makes no change in his nationality or allegiance by settling there. The emigrant to the United States must, on the other hand, before he can take up a free grant of land or possess the right to vote at elections, abjure his own country absolutely and entirely, as will be seen by the following oaths, which each immigrant must take in order to become a citizen of the United States:—

Declaration of Intention.

I, John Smith, do declare on oath that it is *bonâ fide* my intention to become a citizen of the United States, and to renounce for ever all allegiance and fidelity to all and every foreign Prince, Potentate, State and Sovereignty whatever, and PARTICULARLY TO VICTORIA, QUEEN OF THE UNITED KINGDOM OF GREAT BRITAIN AND IRELAND.

JOHN SMITH.

Sworn in open Court,

this _____

SEPTIMUS JONES, *Clerk.*

Oath at the Time of Admission to Citizenship.

I, John Smith, do solemnly swear that I will support the Constitution of the United States, and that I do absolutely and entirely renounce and abjure all allegiance and fidelity to every foreign Prince, Potentate, State, or Sovereignty whatever; and PARTICULARLY TO VICTORIA, QUEEN OF THE UNITED KINGDOM OF GREAT BRITAIN AND IRELAND, OF WHOM I WAS FORMERLY A SUBJECT.

JOHN SMITH.

per acre was about the figure mentioned to me in more than one quarter, as a fair quotation for this description of work, but I am bound to say I would incline to think the job hard at the money. Ten dollars, or two pounds per acre, would probably not be too much to pay to get the work properly carried through, and even at that I cannot but think the farmer would have his perfectly cleared land at a price of which he could have little reason to complain.

In some parts of the Townships the forest is not the only obstacle that has to be dealt with, huge boulders being also rather too plentiful. There are some stones even on the most choice sections; of that no one would complain, but I saw some other sections where these boulders were so numerous as to render the land practically worthless. Parties who think of purchasing land in these townships should therefore be careful to find out before they do so that they are really purchasing land, and not merely stones. A good deal of inspection may be necessary on this point, as, where there is a rank forest growth covering up everything, a merely cursory glance in passing through the forest may detect no stones at all—no matter how plentiful they may actually be—except of course the very large stones, which no amount of vegetation will suffice to hide. Another point worthy of being kept in mind by the intending settler is, that in the case of lands under cultivation, much of what is offered for sale is completely run out. Where this is the case, I am told that it will often cost more to put the land in good heart than it does to bring wild land into cultivation. Great care must therefore be exercised by parties purchasing. Purchasers should also be careful to employ a respectable solicitor, so as to make sure of getting a good title before paying away any money. I heard of several cases of great hardship through neglect of this necessary precaution.

Speaking generally, I think I might venture to say of the cleared land in the Eastern Townships of Quebec Province that it is probably about equal in quality to the average run of land in Ontario (a province which I have also visited), and I must say that I think the Townships have several very material advantages over the more popular province referred to. In the first place, land is much cheaper in the Eastern Townships than in Ontario: I think I might venture to say 30 per cent. less, for equal qualities of land and housing. For a home market they are probably about equally good; and, for an export market, the Townships have the great advantage of being in close proximity to several first-rate seaports. The flat lands in the Eastern Townships are of really high quality. These lands are of course worth a good deal more than the cost of clearing them. In fact I believe some of them may run as high as 70 dollars per acre. But that would mean very fine land, and favourably situated. The same land in the neighbourhood of Glasgow would be worth £3 per acre, or thereabouts, to rent. The hilly land (which is much more plentiful than the flat land, in the sections of the Townships with which I happened to make most acquaintance) is not of the same value by any means, being generally too light and sandy, and I think perhaps fully as badly affected with rocks and stones. But of course it is relatively cheaper. On the whole, I would incline to think that an industrious man, with a few hundred pounds of capital, might reckon on being able to make a living in these Eastern Townships without much risk of ruination—certainly much less risk of that than at home. And he might also find himself growing gradually richer, in a manner, through the increasing value of his farm. But it is no place for any man who wants to grow rich in a hurry; at least for the present it is not so, I feel very sure.

There can be little doubt that this is a healthy and good country for stock-raising—the soil being mostly dry, the air clear and invigorating, and the entire country well watered. I saw many young beasts grazing among the stumps, and thriving well. Disease is, I believe, unknown, in its more serious forms at all events. Horses also do very well. I do not know whether it is the clear bracing air that favours them, but I think they are generally longer winded than the driving horses we have at home. Sheep also thrive well, and good sorts are frequently to be met with.

If stock-rearing (without fattening) for the English market will pay in any part of Canada, I incline to think the Eastern Townships of the Province of Quebec may be as likely a locality for it as any I had the privilege of coming across. And I believe it is a trade that will pay fairly well, so long at least as the colony may retain the good fortune of being exempt from contagious diseases.

I will close my remarks on the Townships with the following extract from my diary, viz.: 'Drove from Scotstown to Compton, and thence to Lennoxville, a very long day's driving. The country improves all the way, and at Compton there are many really fine farms—especially those in the valley. Visited the Hillhurst farm, belonging to the Hon. Mr. Cochrane, and saw his famous Duchess cow, now twelve years old, and the mother of ten calves, two of which I saw. The other eight realised 130,600 dollars, or an average of over £3000 a head. Saw also a pure Duke bull, and two others of the purest Bates blood. Mr. Cochrane is just starting a herd of pure Herefords, which he thinks will be the best breed for the great North-West; has got fifty cows to begin with. Visited also the Hon. J. H. Pope's farm. The apparent comfort of the farmers hereabouts would seem to indicate that the clearing and subsequent farming of land in this quarter are not by any means discouraging occupations.

'Learned that there are always plenty of partially cleared farms for sale in the Eastern Townships, owing to Manitoba fever (which means the tendency to emigrate to Manitoba) and

to ordinary domestic causes, farmers here thinking about as little of selling their farms as those at home do of selling their crops.'

Coming back from the Eastern Townships to the main line of the Grand Trunk Railway, we journey onwards to Montreal. The intervening country is still chiefly in the hands of French Canadians. Cultivation, however, appears to improve somewhat from the moment Quebec is left until Montreal is reached. The quality of the land appears also to grow gradually better, and it is also somewhat more extensively cleared.

Travelling westward from Montreal, we leave the province of Quebec and enter that of Ontario.

On arriving at Ottawa, I arranged to leave the inspection of Ontario to Messrs. Sagar and Curtis; Mr. Broderick and myself proceeding at once to Manitoba. On my return journey, however, I spent about a week in Ontario; and, although so short an inspection is not sufficient to warrant any attempt at a comprehensive report, I ascertained a few facts which seemed to me to indicate that the profits of farming in this province cannot be great. For instance, from all the information I could gather from bankers and merchants, as well as from farmers themselves, I was led to the conclusion that comparatively few of the farmers lay past money. One man, who has relations farming in West of Scotland, confessed that they made more out of their capital, on an average, than he did. Another sign that farming in Ontario is not over-profitable is the undeniably heavy emigration to Manitoba. Another circumstance indicating the same conclusion is the fact that the hope of the farmers of Ontario appears, by all accounts, to lie chiefly in the raising of cattle for exportation to England—an enterprise which, I feel sure, cannot be reckoned upon to leave any great profit to the farmer; so that, if that is their best prospect, I am unable to see how their general prospects can be satisfactory.

Taking land and labour at their present prices in Ontario, a three-year-old ox cannot be raised there so much as £9 cheaper than in England, and it costs that to transport him from the one place to the other, and to pay expenses of marketing. Moreover, this £9 does not include the profit of the exporter, which would require to be other £2 per head at least in a business where considerable losses are so inevitable. The Ontarian farmer would thus appear to work at a disadvantage of £11 per head as compared with his English competitor. Against this he has (1) a lower rent to the extent of about £1 per acre in the case of fair average land: this would come to £6, or say £7, of the cost of raising a three-year-old; in every other respect the cost of producing fodder and other feed is nearly as high as at home. But (2) the Ontarian has less money in his beast, and thus saves interest to the extent of, say £1. This leaves the Englishman with £3 of an advantage, a good part of which he must write off against risks from disease; whereas the Ontarian has to make no such provision.

At present, therefore, the Ontarian can only compete with us in cattle-raising by working at a smaller profit, and if he had disease to contend with he could not do it. In short, but for this really precarious consideration, I venture to say that cattle-raising would be a distinctly less profitable occupation in Ontario than in England, as things go at present. I cannot see, therefore, how land is to maintain its present value in Ontario any more than in England; and indeed, if they come to have cattle diseases to contend with, the fall in the value of land there will be by so much the greater than with ourselves.

In point of fact, I suspect that Manitoba and the Far West (to which so many of the Ontarians themselves are emigrating) will drive down the value of land and of farm produce at least as seriously in Ontario as in Great Britain, so that it is hard to see where there would be any advantage in emigrating to that part of Canada. Of course, if the current prices of land in Ontario be further reduced, without any corresponding reduction of rents at home, then I would believe in emigration to Ontario; but, for the present, the landowner of Ontario seems as unwilling as the English landlord to yield to the fact that our ever-increasing facilities of transport have practically added the vast fertile plains of the Far West to our supply of available grain and cattle producing land, thus rendering that supply so much in excess of the demand that prices must come down and down with every increasing facility for transport.

The only way to stop this decline would be for the Governments of Canada and the United States to place such a price on their unpeopled territories as would prevent settlers thereon from producing more cheaply than the Ontarians and ourselves. So long as there is *no* price put upon these vast and most fertile regions—so long as they continue to be offered to all mankind *for nothing*—so long, I say, must the value of land, both in England and elsewhere, be governed strictly by the cost of production in these new regions, plus the mere cost of transportation to Ontario, or England, or elsewhere, as the case may be. Now, as these expenses of transportation must necessarily decrease with every new mile of railway westwards, and with every new invention in the locomotive powers, and as there is no probability of either Canada or the States altering the present policy with respect to unsettled territories, it stands to reason that the value of land cannot fail to decline to that point (whatever it may be) at which the cost of production in the new country plus transportation to the old, becomes exactly equal to rent plus cost of production in the old country. There is no escape from that law. And if we assume that the cost of production in the old and the new countries may remain relatively pretty much

as they are at present, then the rents here and the prices of farms in Ontario cannot possibly rise, but must alike continue to fall with every fall in freightage from the Far West.

In these circumstances it is awkward to be tied down to a long lease in England, but it is equally awkward to be tied down to a proprietorship in Ontario, and will remain so until the Ontarians recognise their proximity to the gratuitously acquirable farms of Manitoba and the North-West, by a reduction of say 25 to 50 per cent. in the prices they put upon their land. If they were to do that at once, and before English landlords came to see the necessity for doing something similar, they might reasonably expect a good flood of superior emigrants; *but not otherwise.*

Assuming that some Ontarian farmers may soon incline to part with their holdings at the reduction I have ventured to indicate, I may now say that Ontario generally is an agreeable place. I would think the climate (so far as my experience and information go) preferable to that of Scotland, or even to that of England probably. The dry clear air renders even the hottest days no way oppressive.

As to the land it is very much like the land at home, some of it very good and some of it very middling. Its goodness or badness depends also very much on the way in which it is treated. So there is little use talking about the number of bushels of wheat or tons of turnip per acre. But for fruit-growing I never saw the like of Ontario—the peaches especially. If anything would tie me to Ontario, it would be the peaches. I believe most of the country within a few miles of Lake Erie is suited to the production of this fruit in its greatest perfection. Apples grow to perfection throughout the entire Province; and I believe both they and peaches yield a good profit if skilfully managed.

I shall wind up these remarks on Ontario, with a few extracts from my diary:

7th August.—Sailed from Sarnia for Duluth, whence we travel by rail to Manitoba. In the steamer I fell in with a Mr. Allison, who has farmed in Ontario for many years. He came originally from Strathaven. With regard to clearing land in Ontario, he, as well as another experienced Ontarian who was with him, informed me that an average man can clear ten acres every winter; a good man will do an acre a week. And after burning the wood and scattering the ashes, and scraping the land with a V harrow, may sow wheat, and reap about forty bushels per acre the first year, the soil being well manured with the ashes. Part of the timber is of course reserved for fencing. The snake fence is by far the cheapest in Canada. Quickset gets eaten up by mice in winter, and straight fencing is expensive, owing to the necessity for putting the posts in very deep (say three feet), so as to prevent them being thrown out when the thaw sets in. Dairy stock pays pretty well: can draw about 45 dollars per cow, feeding on grass in summer and hay and straw in winter. Few farms are wholly cleared. Clearing is admitted on all hands to be a heavy job; but with ordinary industry and perseverance, Mr. Allison firmly maintained that a man may begin on a forest lot and make his way steadily to fairly comfortable circumstances; and, of course, only a very small capital is wanted to begin with; in fact, many have started with nothing but an axe and a small stock of provisions.

25th September.—Met a farmer from near Niagara, who considers farming, on the whole, fairly profitable, especially fruit-growing; wheat on well-farmed, well-manured land yields as much as thirty-five bushels per acre; maize and artificial grasses are the other crops in his rotation, with one year fallow. His land, like all land near Niagara, is pretty sandy; thinks fruit-growing prospers best near the lakes. A farm near Niagara, with say 10 per cent. under fruit-trees, and with good housing, is stated by the gentleman referred to, to be worth 100 dollars per acre overhead; but farms without any considerable orchard may be had at 60 dollars per acre, even if of high quality otherwise. This gentleman considers that with careful and liberal management, an Ontarian farm of 200 acres, of average quality, should maintain its owner, and give him 1000 dollars per annum to put in the bank in lieu of rent. Of course this 1000 dollars represents interest on the value of the farm, say 12,000 dollars, and the stock, say 5000 dollars, which is equal to about 6 per cent. on the money invested; the farmer's own labour being thrown in against the board and lodging of himself and family.

27th September.—Went through Thompson, Flannigan and Co.'s byres at Toronto, where about 4000 bullocks are fed on distillery slop for six months, commencing about the 1st November. The slop is forced through pipes from Gooderham and Worts's distillery, a mile off, and is run right into the cattle troughs, at 17 dollars per head for the season. This, with a little hay, is the only food they get. With the facilities mentioned, four men attend to 510 cattle. I learned that these cattle must clear 65s. per cwt. in Glasgow or Liverpool to make the trade pay, though if there were few accidents 60s. might not involve positive loss.

These are not the best quality of cattle exported. The best are those which have been grass fed, and then finished off with corn; it does not do to ship grass fed beasts without this finishing, as they would be soft, and would lose seriously on the voyage.

I am told good store stock is getting rather scarce in Canada now.

30th September.—Met an intelligent farmer from Huron county. He says farm hands are getting very scarce there, owing to the emigration to Manitoba. This farmer, as well as many others with whom I have conversed, inclines to name 60 dollars per acre as a fair average for a good farm in Ontario, if without any special advantage, such as proximity to a large town. To

buy such a farm and stock it would probably not require very much more capital than would be required merely to rent and stock a similar farm at home; but neither would the return be any greater over a term of years, probably a good deal less generally, and with no better prospects of selling out to advantage. The risks of serious or overwhelming loss are, however, decidedly fewer in Ontario than at home; so that farmers with barely sufficient capital to carry on their business, and unable on that account to stand through two or three bad seasons, such as Great Britain is occasionally visited with, might be able to keep out of difficulty in Ontario for a lifetime, which, so far, is a compensation for the generally small profits of the calling in that country. To retired merchants, half-pay officers, and other amateurs endowed with agricultural instincts, and with some independent income, I fancy that, on that account, Ontario might be considered preferable to either England or Scotland; especially would I venture to commend to such gentlemen the tract of country from Niagara westwards, along the shore of Lake Erie, where the pleasure of growing peaches and other fine fruits can be advantageously added to the more ordinary occupations of the farmer. To the practical farmer—to the man whose pleasure in the occupation is measured strictly by the profit—I have no hesitation in saying that, as prices of land go at present, the Eastern Townships are preferable to Ontario for cattle raising, and that Manitoba is vastly preferable to both of them for grain growing.

I almost forgot to mention that no one should on any account buy land hurriedly in Ontario. It is particularly advisable to look at several places and make numerous inquiries before purchasing, because the prices of land are in a transition stage there at present, so that as much is often put upon a bad place as upon a good one, according as the seller may happen to think moderately or extravagantly of the prospects of the place, or, in other words, according as the seller may happen to be alive or not alive to the depreciating influence which the opening up of Manitoba is bound to exercise upon the value of land in Ontario.

Perhaps the simplest way of fixing the value of land in Ontario is the following:

1. As there is always a surplus of agricultural produce to export to England, prices in Ontario are naturally the same as in England, minus the cost of transportation thither.

2. Land is of much the same qualities, and labour much about the same expense in either country, so that, *apart from rent*, the cost of production will be the same in either.

3. The value of an acre of land in Ontario is, therefore, just as much less than the same in England as it costs to transport the produce of such land to England. Thus an acre of well-farmed land in Ontario will produce 35 bushels of wheat; and to transport same to England, from, say Toronto, will, under ordinary circumstances, cost about 35s., so that the rent of the land ought to be 35s. less in Ontario than in England. In the same way we may count that a good three-year-old bullock represents a year's produce of about six acres of fairish land (besides labour), and it will cost at least £10 to cover all expenses of sending to England and paying the exporter for his trouble; so that for cattle raising the Ontarian land would require to be 33s. 4d. cheaper than the English to cover that expense.*

MANITOBA AND THE NORTH-WEST.

The immense territory indicated by these titles is of the most varied qualities. Vast tracts are barren and worthless—vast tracts are extremely fertile. Again, narrowing down our view to any particular locality, it will be found, just as at home, that a very fine piece of land may lie alongside a very middling piece. Bog and dry land, especially, are varieties to be found in very frequent contiguity. So also in the same section you will often find the soil much thinner at one place than at another. And, again, over so enormous an expanse of territory, there are necessarily varieties of climate, which of course also materially affect the agricultural properties of the localities in which they prevail. On the whole, therefore, it is not safe to indulge in general statements regarding this Territory. And on the other hand, it is beyond the bounds of practicability for us to treat of every locality particularly. We will therefore attempt to treat of a small part only; and, indeed for all practical purposes of emigration, it is not necessary to do anything more than that, as emigrants going out now will naturally settle either amongst those already out or just beyond them. We will therefore confine our remarks almost entirely to those parts of the country that are already settled, and a little way beyond. This will not carry us more than 250 miles west of Winnipeg.

The Red River Valley, in which Winnipeg is situated, is covered to a depth of probably over two feet on an average, with the richest soil I saw in all my travels. But a very large proportion of it is too wet for cultivation. These boggy parts yield heavy crops of hay—rather coarse-looking stuff, but undeniably nutritious, and not distasteful to the beasts. It is an open question whether these wet tracts will admit of being thoroughly drained, owing to the extremely level character of the valley. I feel pretty sure that tile drains will not do at all events, both because

* NOTE.—It should be mentioned that only a small quantity of the land in Ontario is rented: the farmers generally being their own landlords; also that the taxes are light, rarely exceeding about 1s. 6d. per acre, and that the cost of living is cheaper than in England.

of there being too little fall, and because of the severity of the frosts, which will go deeper than the tiles could be put, and would be certain to disturb them seriously. I fancy therefore that open drainage is the only kind practicable, and this is already being taken in hand by the Government. The plan of the Government is to cut good-sized ditches at right angles to the rivers, and to let the settlers drain their lands into these, by means of plough furrows, or shallow open drains. Fortunately the soil is well suited to this sort of drainage, for it has been found that once a ditch is cut and set running, it has no tendency to fill up, but rather wears gradually deeper and wider, so that in time these Government ditches will no doubt become small rivers. These ditches will of course require to be paid for by means of taxation. If the Red River Valley land can be drained at anything like a small figure, I have no doubt it would pay to do it even just now, as when dry, it is undeniably the best wheat land on the American continent. In any case, it will pay to drain it some day, no matter what the cost; though of course it would be foolish in the Government, or any individual proprietor, to lay out any heavy expenditure on it just now, while there is yet abundance of nearly as good land dry and ready for the plough in the immediate neighbourhood.

As for the naturally dry land of the Red River Valley in Manitoba, all I can say is that there is nothing like it. The wheat crops which it produces do not, it is true, show such an average as would be considered great in England; but that is not the fault of the land. I suppose the farmers find that it pays them better to till a big breadth badly than a small breadth well. At all events that is what they seem inclined to do. But withal, the extent under cultivation is still insignificant in comparison with what is lying in its natural state.

About 40 bushels to the acre is the best yield of wheat I came across, even in the Red River Valley; and I doubt if the average this year would be much over half that, owing to the exceptionally late and wet seeding-time. But with really careful management, including a little manure and an occasional fallowing, I cannot but think the average wheat-yield of dry land in the Red River Valley should reach 50 bushels, or even more than that in the northern half of the valley. The further south you go the land loses in strength and gains in dryness, until away far south, in the states of Minnesota and Dakota, it becomes quite sandy. All Manitoba, however, is strong enough.

There is a large tract of generally dry land from Poplar Point to Portage la Prairie, or, say, from forty miles west of Winnipeg onwards to seventy miles west of that city. I would almost venture to say that, take it all over, there is not a better tract of land than this, and of equal extent, in all Manitoba. The value of land in this quarter is a thing not easy to fix. Some men seek as high as 15 dollars per acre, while others, with equally good land, would sell it at half that, or even less. This district is already penetrated by the Canadian Pacific Railway.

Of course there is no free-grant land now obtainable here, so that it may not suit emigrants of small means; but, for men with £1000 or upwards of capital, I incline to think it is worthy of attention. Its better situation and its higher quality render it all its price more valuable than the lands of the Far West. Wood and water are also pretty easily procurable hereabouts. As a result of a good deal of inquiry, I believe wheat can be produced in this quarter at 2s. per bushel just now; but, with the natural development of facilities, it may probably become practicable to produce it profitably at even a lower figure, the land wants so little labour and so little manure. When the new railway is ready, as it will be very soon, it will be easy to deliver this wheat in England at about 1s. 6d. per bushel; so that once Manitoba gets fairly set agoing, it is hard to see how wheat in England is to average over 3s. 6d. per bushel.

But it will take time to come to that. For the present, farmers in Manitoba have so little capital in comparison with the extent of their lands, that only very trifling areas get put under crop. There can be no mistake, however, as to the merits of the country for wheat-growing. No part of the United States (so far as I have seen or heard), nor Ontario, nor Great Britain, can possibly compete with it, taking land at its present prices in Manitoba and in these other places respectively; so that, once the wheat-growing capabilities of Manitoba are extensively utilised, the value of wheat-growing land in these other places must seriously deteriorate.

Wet land in the Red River Valley is not worth over 2 dollars per acre; half that would be as much as it would bring if far from Winnipeg or from the new railway.

The Mennonites have some very fine land reserved for them. The term of reservation, however, has nearly expired now; and as a large portion has not yet been settled by these people, the same will be thrown open for general settlement. Of that I was assured by the authorities. Assuming that this will be done, I would incline to recommend emigrants to have an eye to these Mennonite lands. I drove through one of the settlements—the one to the west and north-west of Emerson—and am safe to say it is well worthy of attention. The soil is barely so strong as that from Poplar Point to Portage la Prairie, but it is strong enough, and very evenly and satisfactorily dry. The proximity of the Mennonites is also an advantage, as it ensures an abundant supply of labour. I believe these Mennonites are peaceable enough people; but it is absurd to compare them, as has often been done, to the members of the Society of Friends.

This Mennonite land is within comparatively easy access of Emerson railway station, so that, on the whole, I think farmers with means might advantageously invest in it, if the Government be prepared to sell at a reasonable rate—say 5 dollars per acre; and I scarcely expect, from

anything I know, that they will ask more. At that price, an energetic man of fair means—say £2 per acre—would be able to clear off the cost of his land the very first year, so that he would ever afterwards be as well off as if he had taken up free-grant land, and he would, of course, have his immediate market, and otherwise advantageous situation, all to the good. Emigrants with means should certainly keep these circumstances in view. If they go away Far West, where there is no railway, nor market for produce, they must sit still till such arrive. If, on the other hand, they spend 5 to 10 dollars an acre in the purchase of first-class land immediately accessible to a market or to a railway, they may clear off all the purchase-money the while the settler on the free-grant lands further west is waiting for the railway to arrive, before he can begin operations at all extensively.

Throughout the Red River Valley (and it is larger than all Scotland) there are many tracts of fine land besides the two I have referred to. And then there are also many sections, which are partly dry and partly wet; but for the present these need not be particularly referred to, except to say that anyone whose fancy lies towards a place of that kind, would require to be careful where he planted his house, so as to ensure for himself a dry road to the outer world at all seasons.

I do not know that I need explain that a vast extent of the Red River Valley is in the hands of speculators, who bought it up from the Half-breeds. The e Half-breeds had 1,400,000 acres allotted to them by Government, a great deal of which has got into the hands of various speculators in Winnipeg and elsewhere. In many such cases a bottle of whisky was sufficient to buy a farm. Then again, all the land, for two to four miles back, along the banks of the Red River and the Assiniboine, was originally allotted in strips to the discharged servants of the Hudson's Bay Company, who still hold them to a considerable extent, but are mostly willing to sell at reasonable rates. If I were buying a farm in Manitoba, I would think it an important advantage to have one or more of these river strips in addition to any other land I might have, so as to ensure a supply of wood, which, for the present at least, grows hardly anywhere in Manitoba, except along the banks of these large rivers. The unlimited supply of water is also an advantage, though there are few places in which water may not be had by means of wells.

It is well enough known that the river water is not very good, and that the well water even is not all good; in fact, much of it is very middling, and plenty of it very bad. There seems little reason to doubt, however, that good water will be found in ample quantities in all localities by means of deeper wells than can be conveniently sunk by settlers generally just now.

In concluding my remarks on the soil of this most splendid valley, I have to say that, for the present at least, it is disagreeable in wet weather. The mud is something quite incomparable in point of stickiness, and the rain brings forth small frogs in millions. The settlers make soup from the hind-legs of these creatures, and declare it to be very fine. I never tasted it.

There is not such a thing as a hard road in the country, so that the mud is a thing that cannot be escaped if one goes out of doors at all in wet weather. Even the streets of Winnipeg are still innocent of all hard material, except the footpaths, so that, after a day's rain, the horses are up beyond their knees and the carts to their axles. Things, however, will no doubt gradually grow right in all these respects; for it is really inconceivable that a country so extremely capable of furnishing forth the necessaries of life, should remain for ever disagreeable in any respect that admits of being mended by the inhabitants. Of course it will take time to bring about these improvements, but probably not a long time.* There are abundant supplies of gravel and road-metal now obtainable for Winnipeg by means of the railway. In the country districts, however, metal roads may remain scarce for many a day; and, in fact, with the exception of two or three months in the year, they are not wanted; for in the dry weather the land itself makes an exceptionally good road, fit to stand any amount of traffic; and then, in the winter months, the whole country is as hard as iron.

Another momentary drawback to Manitoba is the presence of so many blackbirds; there are millions of them. Unless something is done to keep them down, they will practically diminish the yield of wheat to a serious extent. However, as they are good for eating, I have no doubt they will be kept duly down by-and-by. The mosquitoes are also a little troublesome, but not very.

Of all the drawbacks to Manitoba, however, the most material one, and in my humble opinion the only one worth calling a drawback, is an occasional plague of locusts, or some such insects, which eat up every green thing. I believe that, on an average of years, their ravages do not amount to anything insufferable; but if they were to happen to come for two or three years in close succession, they might leave very little food for man or beast. Judging from past experience, however, the chances of so calamitous a visitation are not great. During the present century they have appeared in devastating numbers only three or four times, and that at long intervals. So, if they be no worse in the future than they have been in the past, no one need shun the country on their account.

The long winter is also a thing to be considered. The country is as hard as iron for five months, and the temperature much lower than we know anything at all about in Scotland. It

* Note.—Manitoba is now being divided into municipal districts; and one of the first duties of those corporations will be in regard to roads in the Province.

is not unbearable, however. People who have lived through it for years look quite well; and, indeed, they declare it to be by no means so disagreeable as the raw wet wintry weather of the British Islands. It is seldom that one catches cold out there. The dry clear air seems to prevent that, in wet and cold weather alike. I myself have slept in damp clothes, with the wind whistling through the tent about my ears, and still awoke in the morning fresh and well, and without a vestige of cold. If you expose yourself thoughtlessly in winter, you may get frozen to death; but you won't catch cold. The climate is, in fact, undeniably healthy; but care must be taken in winter not to go far from the house without ample precautions, in the shape of buffalo robes or other warm clothing.

Of course nothing can be done on the land during these winter months; but still a good deal of employment may be found in putting up housing, hauling wood, threshing and taking grain to market or railway station, attending to cattle, etc.

Speaking of cattle, I may say that I doubt if they will ever be other than a secondary consideration in the Red River Valley. The long winter, and the necessity for house feeding, will always make it dear to raise them there, in comparison, at all events, with the cost of raising them away in the Far West, near the base of the Rocky Mountains, where the winters are greatly milder, and the cattle never require to be housed at all. At the same time it is the fact that there is a decided scarcity of cattle in the country at present; and so long as that may happen to continue, the rearing of them cannot fail to be profitable. Looking beyond the accidents of the moment, however, wheat is the thing that is to make the country rich. That is the product with which it can defy the competition of the rest of the world. That and potatoes; but they, of course, are not so well suited for export. I never saw such a country for potatoes—ten tons to the acre—with no manure, and no cultivation worthy of the name. Turnips, carrots, and other vegetables also very strong. I saw no beans growing, but I cannot help thinking it might be a good country for them, and that they would be a good crop to alternate occasionally with the wheat. Oats grow healthy and strong, and heavy to the acre, but not heavy to the bushel; they ripen too fast. By-and-by it is very likely that a variety better suited to the climate may be found. So also with wheat; it would be a great thing for the country if they could find a variety that would stand through the winter: at present, spring wheat is the only sort cultivated. It would divide the work much better if the wheat sowing could be got over in autumn, and no doubt it would help to lead to heavier crops as well.

The labour question is one that has not yet presented any difficulty. Labourers, it is true, are not plentiful, but the demand for them is not great either. Were capital poured at all freely into the country, I have little doubt labourers would also turn up. From away far south, in the United States, large numbers of men set out annually to reap the harvest northwards, and northwards through Dakota. They will no doubt go over the border into Manitoba, as soon as they are wanted. Then there are Mennonites, and Indians, and Half-breeds, who, though lazy, are fond of dollars, and will doubtless grow gradually willing to do a good deal to get them. For a long time there will also be a stream of fresh immigrants annually, many of whom will probably incline to hire themselves out for a season before settling down.

We shall now proceed to the North-West Territory, where those emigrants must go who want to take up the free grant lands. Before leaving the Red River Valley, however, I would like to say that if, by the time this report gets published, it should happen that the unsettled Mennonite lands, already referred to, are offered by the Government as free grants, rather than for sale, it would, I think, be more immediately profitable to settle on them, rather than go further west. The point will no doubt be decided shortly, so that anyone going out next season will easily obtain the information from any of the emigration agents.

Leaving the Red River Valley about 25 miles to the west of Portage la Prairie, or 90 miles to the west of Winnipeg, we pass through a section of rising sandy land, which would incline one to think that the Red River Valley may at one time have been a great lake, and this its margin. The character of the country is now very different from what we have been accustomed to since we entered the Red River Valley, at Glyndon, in Minnesota. From then till now, all the land we have seen has been as flat as a table, and in many places not a tree nor a hut to be seen—nothing but grass, as far as the eye could reach. We felt the monotony of the scene somewhat oppressive at first, but soon got used to it. Now, however, that we have got out of the Red River Valley, we are away from all that; and on these sandy ridges we feel as if we were at home, except for the scarcity of houses and of population. This sort of land extends from the Red River Valley to the Big Plain, a distance of perhaps 15 miles. There are odd bits of very good land amongst these ridges—sandier than in the Red River Valley, and will not stand such heavy cropping, but still very good, deep, black land. I stayed overnight with a gentleman who had purchased 480 acres of it, at about two dollars per acre, with abundance of wood and water of best quality. He has also the advantage of being surrounded by that sandy land, which is not likely to get settled up for many a day, and so he may have the use of it gratis.

The Big Plain, which we enter after half a day's journey over the mixed stretch just referred to, is almost as monotonous as the Red River Valley. No trees and no streams, but still plenty of good water in wells. There are a good many settlers on the plain, and room for a good many more. The land is nice dry reliable looking stuff, but just a trifle too sandy. The black soil,

however, is deep, probably 18 inches on an average, and the crops are healthy and of fair weight; wheat perhaps 20 to 25 bushels per acre. Grass does not grow strong here; the soil is too dry and sandy for it. This plain will be, I think, about a thousand square miles in extent. I did not see much wet land on it—certainly not more than enough for hay. On the whole it is a moderately good place to settle. But, of course, its qualities will not last so long as where the land is heavier.

After leaving the Big Plain, we pass through a region of ponds and brushwood for 20 miles, with very few settlers; this brings us close to Minnedosa, on the Little Saskatchewan, and then we find a few settlers. All this broken pondy land is of decidedly superior quality, and it is said that many of the pools admit of easy drainage. That, however, is an expense to which no one will think of going for the present. For grazing it is fine as it is, and there is an unlimited supply of hay; so, any one who is determined to try stock farming, with quite a limited extent of ploughing, might do very well here. These ponds are alive with ducks. Minnedosa is called a city, but it is quite a small place. There are several good stores in it, saw-mill, grist-mill, smithy, stopping-houses, etc. The Little Saskatchewan is a considerable river of good water, and plenty of timber on its banks higher up. For 10 miles west of Minnedosa the land continues bushy and pondy. For the next 20 miles there is rolling prairie, mostly of pretty good quality, with swampy bits every here and there, only suitable for hay. In all this stretch of 20 miles we found no good water, and almost no trees, and very few settlers. I would have a suspicion that this stretch is afflicted with the presence of too much alkali. The taste of the water and the appearance of the grass both indicate something of that kind. The next few miles are too low lying and wet for ploughing; and then Shoal Lake (a mounted police station) is reached, 40 miles from Minnedosa.

Shoal Lake is clear fine water, with a gravelly beach—a pretty place with a most comfortable stopping-house. All the land to the north-east of Shoal Lake, towards Riding Mountain, is pretty well settled, chiefly by Scotch. But towards the south there are few settlers, though the land is good, and the water good, but timber somewhat scarce, while to the north it is abundant. This quarter is worthy of some attention. It has been neglected owing to a place of superior attractions having been discovered further west. But many of the best sections of the latter have now been taken up, so that the large district down the Oak River, to the south of Shoal Lake, may now afford as good free-grant land as may be found, unless by going still further west than the superior district above referred to. The soil hereabouts is 12 to 18 inches deep, resting on a good subsoil of medium stiffness, not too sandy. A blacksmith is much wanted at Shoal Lake. A joiner also might probably do well. Of course they would take up free-grant land.

From Shoal Lake westwards to the village of Birtle, on Bird Tail Creek, 20 miles, the land continues generally good, and some of it everything that one could wish. It is not yet extensively settled; but many of the very best lots are taken up. There is a good deal of first-class hay land hereabouts, the marshes being large, and not too wet. Most of them admit of easy drainage into the creeks, which mostly run in deep gorges out in this quarter. In this tract of 20 miles, between Shoal Lake and Bird Tail Creek, there is still an abundance of free-grant land of good quality open for settlement. The land office for it is at Birtle, and the gentlemen in charge are very capable and obliging. The country is diversified somewhat, and pleasant to look at; and the soil almost all of satisfactory strength and depth. Altogether it is a decidedly good locality. When I was there the land was not all surveyed, and immigrants then arriving were in some difficulty where to squat, as, if they happened to settle on land that was not free-grant land, they might subsequently be compelled either to remove or pay a price for it. Next season there will be no difficulty of that kind in this quarter at least.

Of course it is to be remembered that this place is over 200 miles from Winnipeg, and that until the Canadian Pacific Railway is extended this length, there will be no reliable market for produce. Incoming settlers may want a little, and in some seasons Government may possibly want to buy a good deal to feed the Indians; but neither of these markets can be considered sufficient. Of course, even without the railway, no settler is in danger of starving in such a fertile country; but if once the railway were there, I cannot but think that the settlers might soon find themselves getting into really comfortable circumstances. The workmen engaged in making the railway will want a lot of farm produce.

In travelling from Birtle to Fort Ellice, I went a round-about way, by the east side of Bird Tail Creek, and through an Indian reserve. On this route I passed over some of the very finest land imaginable—within an ace of being as strong as the Red River land, with natural grass that could not be surpassed, abundance of fine water and wood, and a sufficiently diversified landscape. I cannot conceive any immigrant to this quarter ever regretting his choice of a home. Here the great River Assiniboine flows very tortuously through an immense gorge about half a mile wide and 200 to 300 feet down below the level of the surrounding prairie. For two or three miles back from the river, on either bank, the land is quite too light and sandy, but after that it is mostly good. Journeying northwards from Fort Ellice to Shell River, we pass over, first, two or three miles of light land—for the next ten miles the land is stronger, soil two feet deep, with a nice moderately strong subsoil—all fit for ploughing, except a few large hay marshes, which could be very easily drained, but they are probably more useful as they are. Beyond this the land grows still

stronger as we get north towards Shell River, but is a good deal more broken, more ponds, more wood, more bush. As a rule, in this North-West Territory, it has seemed to me that the strongest lands are almost all encumbered a good deal with ponds and brushwood; which indeed is only natural, as the lighter, sandier land, will neither hold water nor grow rubbish (or anything else) so well as the stronger soils. Consequently anyone who is bent upon having the very best class of soil must, as a rule, make up his mind to some extra preliminary labour at clearing and draining before he can have the *whole* of his land ready for the plough. On all sections, however, there is a large proportion of immediately ploughable land. Very little of the large tract bounded on the west and south by the Assiniboine, on the north-west by Shell River, and on the east by Bird Tail Creek, is yet occupied, except along the banks of Bird-Tail Creek, and about thirty families at Shell River settlement. All of the settlers in these parts to whom I spoke appeared to be really cheerful and satisfied; and I incline to think they well may. As good a farm can be got here as to the east of Bird Tail Creek, to which I have already referred; and a better one may be had in either of these localities than at any point for many miles further west, beyond the Assiniboine. In fact, once this Shell River district and all east of it gets taken up, it is not unlikely that immigrants to the North-West may pass over more than 100 miles of poor or middling country so as to get to the neighbourhood of the Touchwood Hills, where the best class of land is said to be quite plentiful. Away up here in the North-West there is one considerable drawback, as compared with the Red River Valley, and that is that the seasons for seeding and reaping are shorter by several days—perhaps even a week or ten days sometimes. Settlers up here would therefore probably do well not to go in too exclusively for cropping. A finer district for dairy-farming could hardly be imagined.

29*th August.*—Drove from Fort Ellice with Mr. McDonald, Hudson's Bay Company's factor, ten miles north-east, to see Mr. Dawson from Lincolnshire, who settled here last year; passed over a large tract of most desirable land. Mr. Dawson is on the west bank of Snake Creek, and has good crops and a splendid farm. He has just purchased eight or nine very fine Galloway cattle. Mr. McDonald (who knows all this country well) informs me that away to the south of Fort Ellice the land is good, but destitute of timber, except along the river bank. Mr. McDonald thinks highly of the land away westwards by the Qu'appelle, and in the Touchwood Hill district, although for the first eighteen miles west of the Assiniboine it is not good. This is also the report of Mr. McLean, the Hudson's Bay factor from Fort Qu'appelle, whom I had the pleasure of meeting at Fort Ellice. Mr. McDonald also informs me that to the north-north-west of Shell River the country generally is only suitable for cattle, being a good deal broken, and the seasons rather uncertain. The wood region does not begin till north of Fort Pelly, which is 120 miles north of Fort Ellice. Mr. Marcus Smith, of the Canadian Pacific Railway Survey, called at Fort Ellice to-day. He has been up and down the country surveying for nine years, and gave much valuable and reliable information, which is interwoven here and there throughout this report. We now turn homewards, with a feeling that we shall look in vain for any finer farms than are to be found on the best sections of the Bird Tail Creek and Shell River districts; and as there is comparatively little of it yet taken up, I have no doubt all immigrants for the next year or two may find lots to their mind.

Driving south-east from Fort Ellice, along the north bank of the Assiniboine, we find the first sixty miles to be rolling treeless prairie—much of the soil rather too light, but still here and there a piece satisfactorily strong: very few settlers on all this. On one of the Indian reserves I saw some really good crops, and most creditably managed; in fact, I did not see any more tidy farming in Canada. I am sorry to say, however, that the Indians are not so industrious throughout the entire country as they seem to be on this reserve. The land composing the reserve referred to is pretty sandy, and of course easier to manage than the stronger soils; in that respect it is well suited for beginners, like the Indians; and I would almost venture to suggest to the Dominion Government the propriety of seeing that all the Indian reserves should be composed of land of that class. On other reserves, where the land was immensely stronger, but of course less easy to manage, I found a much less satisfactory result. At the mouth of the Oak River there is one of these reserves, on low-lying alluvial soil of a quality equal to the Red River Valley; but not nearly so suitable for Indian farming as the lighter lands on the plains. From that onwards towards Rapid City the treeless prairie continues for twelve or fourteen miles—soil still rather sandy generally—black, say fifteen inches, with rather a sandy loam for subsoil. None of the grass on this light land is heavy; but it is nice grass, and, in the course of time, this may come to be a fine sheep country. Water seldom seen, but said to be easily procurable by means of wells. Saw one settler (an Ontarian), who said he rather preferred this light sharp land to the stronger soils further north, owing to the shortness of the seasons for sowing and reaping. In this he is so far right, though, on the whole, I would rather have the stronger land, and not crop more than I could easily overtake in even the shortest of seasons, devoting the rest of the land to dairy or stock farming, as already indicated. On nearing Rapid City the soil gets stronger, and also (as a consequence, I suppose) more broken by ponds and scrub. All the good bits of the Little Saskatchewan district near Rapid City appear to be taken up. Rapid City is growing quickly. It is a nicely situated place—not too flat, like Winnipeg and Portage la Prairie. Plasterers here are getting 14s. per day, and carpenters 9s.

An agricultural college is being established in the immediate vicinity of Rapid City, similar to that at Guelph, in Ontario, whence several professors are coming. The Guelph one is self-supporting, I am told, through student-labour, and this one is expected to prove so too. It possesses 1000 acres of land. I thought I saw a deal of public spirit and enterprise about Rapid City. Good land, within two or three miles of Rapid City, sells at 10 to 20 dollars per acre; further out, about 3 to 5 dollars. Away to the south of Rapid City, on the Big Plain, there is a good deal of really fine land. Crops look well; a patch of alkali here and there; wood and water both scarce, though it is not doubted the latter may be had anywhere by means of wells.

As we pass on to the south-east we find a good many somewhat gravelly places, with some stony, also a few pond-holes all dried up at present, and yielding heavy crops of hay. The natural grass on this plain generally is not so light as it is on more elevated plains of equal quality of soil. There is still plenty of free-grant land available on this plain, and, though it is not all first-rate, there are many first-rate sections to be had for the looking for. But it is about as utterly shelterless as any part of the Red River Valley. Withal, if wood for building and fuel were only a little easier to get, I have no doubt the proximity of Rapid City and the navigable waters of the Assiniboine, and also its own considerable agricultural merits, would soon lead to this plain being all taken up. The Assiniboine banks here are low—no great gorge as at Fort Ellice—and the land adjoining them is of superior quality. The ferryman at Rapids Crossing has good crops of wheat, oats, and potatoes. The wheat looks like 30 bushels to the acre, but the blackbirds will soon make it less. At five miles south of the Assiniboine we find black sandy loam 18 inches, with pretty stiff subsoil; also numerous patches of gravel; good water supply; wood at Brandon Hills, three miles off. The land generally improves as we get nearer these hills. A good many settlers in this part, but plenty of good land still unoccupied. The land here is rather stronger than it is on the open, treeless prairies we have been passing over, but not so strong as in the broken pondy district of the Little Saskatchewan, or in the districts of Bird Tail Creek and Shell River. On the whole, this Brandon Hill quarter is a decidedly desirable one; but, of course, all the best free-grant sections in it have been taken up. I am assured, however, that pretty good ones are still to be had in the neighbourhood, and of course there are plenty of unoccupied railway sections of the best quality for sale; and the price will probably not be high, though at present it is not possible, I believe, to speak with certainty on that point.*

We now pass through the Grand Valley, where there is much fine land pretty well taken up, and a good deal of rather gravelly land not much taken up. On arriving at the Souris Land Office, we learned from the agent that immigrants to his district next season will be advised to go twenty miles southwards to the Souris Plain, and westwards into the Plum Creek neighbourhood, where he says there is good timber and better land than any previously surveyed in this part of the country. I am sorry to say that, owing to an accident to one of the horses, it was impossible for me to go west to see this Plum Creek district; but I incline to believe the report of the land agent respecting it may possibly be correct, as I heard from another reliable gentleman, while at Fort Ellice, that the land about Oak Lake (out of which Plum Creek flows into the Souris) is of high quality. I would be doubtful, however, if any of it is as strong or good as the best lands in the region of the Bird Tail and the Shell River.

We stayed over the night at Milford, a rising town of two stores, a smithy, a saw-mill, and the prospect of a grist-mill next year. Called next day on Messrs. Callander and Reid, five miles south-east of Milford, on the banks of Oak Creek: fine water, plenty of timber, beautiful situation, and a decidedly good farm. If the land agent's paradise at Plum Creek is as good as this, I can recommend it. But there is no first-class free-grant land just hereabouts now—none til we get up to about Lang's Valley, where the Souris, coming from the west, bends northwards. From Callander and Reid's towards Lang's Valley the land for the first seven or eight miles is pretty good prairie, then a large tract of somewhat hilly land, say five miles north and south, by fifteen east and west. In this hilly quarter there are several fine lakes, and plenty of good grazing and hay land; also some timber and evidently some heavy game. I saw a bear, and plenty of foxes, also a few deer. A finer country than this for hunting in could hardly be imagined. In this clear, exhilarating atmosphere good horses can hardly be tired out. Lang's Valley, at the bend of the Souris, is quite a dip down from the level of the surrounding prairie; it is not an extensive tract. There is a nice little stream of water running through it, the last we shall see for a good while. Most of the land in the valley is good hay land; some of it dry enough to plough. Mr. Lang praises the land away west by Plum Creek.

Leaving Lang's Valley we enter on a vast expanse of slightly rolling prairie, which extends southwards for twenty miles or so to the Turtle Mountains, and westwards hundreds of miles. On the borders of this plain, adjoining Lang's Valley, there is some timber, and the only settler on it told me he found good water by digging an eight-foot well. A large tract of the land just here is worthy of special attention. Where the well above referred to was sunk the black soil is two feet deep, with layers of clay and sand underneath. The black soil is a sandy loam of medium

* Note.—The maximum price of the railway lands along the route of the Canadian Pacific Railway is 5 dols. (£1) per acre.

strength—really useful land, and will be easy to work. No drainage will be necessary hereabouts, nor any clearing away of bush. There are a few hay marshes, but not more than will be wanted; and every other acre is immediately fit for ploughing. Along the banks of the Souris there is sufficient timber for immediately adjoining settlers; and when it runs down there will, I believe, always be a practicability of getting boards at the Milford saw-mill. On the whole, I think I might venture to specially recommend this quarter to the attention of any immigrants who feel as if they might be disheartened by the ponds and brushwood of the stronger lands up about the Shell River.

But let it not be supposed that all this vast Souris plain is equally good. I spent several days on it, taking a very zigzag course; and I do not know that I found any of it better than the piece, of about a township in extent (say thirty-six square miles) in the vicinity of Lang's Valley, already referred to. Beyond that, westwards for about fifteen miles, there is a good deal of the land gravelly, with very thin soil; and also a good deal of it stony. But, interspersed therewith, one also comes across many a good bit; and of course anyone going in during the next year or two will have no difficulty in securing such, as there is only one settler, or two at most, there yet. I travelled for days over this plain without encountering a human being, or seeing any trace of one—a boundless grass park, with nothing on it now but a stray fox, or deer, or skunk, and a few buffalo bones. There are no buffalo hereabouts now; at one time there were hundreds of thousands.

Travelling further west we find no change in the character of the country; but, on turning southwards, away from the neighbourhood of the Souris, we begin to cross more frequent patches of fine land. The prairie gets to be more rolling, and the hay marshes more numerous, and some of them very large. On the whole, however, I am doubtful if this vast Souris Plain contains more than thirty or forty per cent. of first-class ploughable land. But in saying that, I ought to explain that I am speaking with the fastidiousness of a Manitoban, and so condemn all land that requires money to be expended on it to make it ploughable and fertile—a doctrine which is quite correct in a country where there is so much faultless land to be had for nothing, or thereabouts. We now steer direct for the Turtle Mountains, which necessitates our crossing a terrible marsh, whose area cannot be much under 40 square miles. I would rather go a good bit round about than cross that marsh again. In the middle of it is White Lake, where there are innumerable ducks; we also saw large flocks of wild geese; and, out on the Souris Plain, there are more prairie fowl than we encountered in any other quarter—altogether an extraordinary locality for wild fowl. The Turtle Mountains lie along the border of the United States; and, for 5 or 6 miles north of them, there extend tracts of really good land, on which there are a good many settlers, but still plenty of room. Emigrants who think of settling here should leave the train at Emerson. In many respects this is a particularly desirable locality. There is abundance of timber on the Turtle Mountains, and numerous streams of splendid water flow from these mountains northwards. The soil is of various qualities, but, for the next year or two at least, all immigrants may easily obtain a good bit. It is very much like the Souris Plain soil—perhaps a shade stronger—black sandy loam, 12 to 18 inches, or perhaps 2 feet in some places; subsoil pretty stiff, but not more so than they like it out hereabouts. There is also plenty of lime in the district. There is but little scrub, and, on the whole, not too much marsh or hay-land, some parts too stony, but no immigrant need settle on these for the present. I am told there are now 150 settlers in the district, but there is still room for thousands. The Land Office is at White Lake. The greatest drawback to this district is that there is no immediate prospect of a railway; but, for my part, I cannot see how so fine a tract of country is to remain either unsettled or unrailwayed for any great length of time. In any case, so large a district cannot fail to furnish a moderate market from incoming settlers for a year or two. Altogether, with its abundant wood and water, this is a comfortable-looking spot to pitch upon, and there is plenty of room. Emigrants coming out in the wet season, however, should not look near it, as the streams which flow across the trail are then big, and there are no bridges, and to ford them is an enterprise to which I will never recommend any honest man. In point of fact, there can be little sweet travelling anywhere in Manitoba during the wet season. From Turtle Mountains eastward, to Badger Creek, the land continues to be pretty much as above described, except that the gravelly and stony ridges become rather more frequent, and of course we are always getting further away from the fine timber-supply of the Turtle Mountains. Down Badger Creek, which is a small river of beautiful water, with some timber along its banks, I am told there is still sufficient free-grant land, of high quality, for quite a number of settlers. At Rock Lake, several miles down, there are 150 settlers already.

Driving 16 miles further east, over rather a rough-looking country, to Clearwater village, we see no signs of settlers till we get to the village, where there are a good many, and all apparently more comfortable than those further west are yet. In fact many of them appear pretty well-to-do. I learn that all the land hereabouts is either settled or bought up, and so also all to the east of this, over which we have yet to pass.

From Clearwater to Pembina saw good crops of oats, fair crops of wheat, and most excellent potatoes. This tract is very level, and of high quality, almost every acre of it fit for ploughing; but it is not to be had for less than 3 to 5 dollars per acre. This class of land continues for a

few miles east of Pembina River Crossing. After that the land gets even better, but is so boggy and scrubby that only a small proportion of it is fit for ploughing. Passing on to within five miles of Mountain City we enter on a tract of as useful land as we have seen anywhere. Saw a man who came from Ontario three years ago with 500 dollars, and took up 320 acres, for which he has now refused 3,500 dollars. The land here undulates a little, is dry and well-wooded, and about strong enough. Black soil as much as three feet deep. I do not know that we have seen any better land for general purposes than this part of the Pembina Mountain district. Wheat is said to average 35 bushels after the first year, which, from all I saw, I half incline to believe. There are to be three cattle shows hereabouts within the next three or four weeks. Many of the settlers are now in course of getting nice frame houses erected in front of their original log shanties. Churches and schools are in progress, and in some instances completed; and altogether the country is assuming a look of comfort which, considering that it is only three or four years out of prairiehood, may well cheer and encourage settlers in the further west. A few miles east of Mountain City we dip again into the Red River Valley, with its dead-level magnificent wheat land, little good water to be seen, and trees only in the distance.

I have now done. In concluding I merely want to say that, notwithstanding the high quality of the soil, Manitoba is not a country for every sort of person to go to. As Bailie Nicol Jarvie would remark, it is far away from all the 'comforts o' the Saut Market.' So, any person to whom these are a necessity had better delay coming to Manitoba, for a few years at least. It is in many respects a sort of agricultural paradise, but for the present it is rather a dreary one. That dreariness, however, is just the price which present immigrants have to pay for their estates, and I really cannot think them dear at the cost. The feeling of loneliness must be worse in winter time; and to combat it, I would almost venture to suggest that every man going out there should take a wife with him, and that two or three should go together, and build their huts alongside each other. It is grievous to see so many bachelors as there are in Manitoba, wasting half their time upon household work, and wearying for want of society, when both evils might have been prevented by a little forethought and courage. No doubt one cannot but have a feeling of unwillingness to ask a woman to enter on a life of even temporary roughness; but after some little experience of it myself, both in tent and shanty, I feel safe to say that no one need shrink from the experiment; in my humble opinion it is neither disagreeable nor dangerous.

I close with the following sketch by a gentleman who has been three years settled near Morris, on the Red River, where he has 560 acres of fine strong land, viz.: Consider that a settler with a yoke of oxen should raise 30 acres of wheat, besides sufficient vegetables for his own use; with two horses he could probably do 40 acres; expenses of living, say £0 dollars a year, if done economically. After three years a man starting with no spare capital ought to be in a position to hire one man, and so double his crop; but to accomplish this requires diligence and economy. To begin rightly, a man requires nearly £200. He may do with half that, but his progress will be slower, and his discomforts greater. This gentleman recently purchased 240 acres of first-class land, all arable, on the east side of the Red River, at three dollars per acre. Considers it even stronger than on the west side of the river, but requires more careful cultivation; considers that money is most certainly to be made by growing wheat in the Red River Valley, but not without patience and perseverance as well as capital. Considers the conditions of life hard, both as to weather and work, and circumstances, but still not intolerable. He himself works out all winter, hauling wood, building stables, etc., etc., and wears no underclothing. If the man had a wife, I cannot see but that he and she would be as well off as Adam and Eve.

REPORT OF MR. JESSE SPARROW,

Woodlands Farm, Doynton, Bath.

HAVING been selected as the delegate from the county of Gloucester, at the invitation of the Canadian Government, to visit the Dominion and to report upon its suitability as a field for the settlement of agriculturists, I now proceed to make my report.

I started on my mission on August 11th, 1880, and embarked on board the steamer *Peruvian* of the Allan Line, which sailed on the 12th for Quebec. While on board I was introduced to Professor Sheldon, of the Wilts and Hants Agricultural College, who was also proceeding to Canada. We made a very favourable voyage, and landed at Quebec at mid-day on the 21st August. We had an introduction to Professor McEachran, the Government Veterinary Inspector, who watches the cattle-trade from all the ports.

He drove us to the heights of one of the forts formerly used for garrison purposes, but now fitted up with capital sheds and yards capable of accommodating over 200 head of cattle. There was a quantity of stock in quarantine at the time of our visit. Amongst them some very fine Herefords and some excellent Aberdeen bulls, also a few shorthorns, and other breeds, in all about 150. There were also different breeds of sheep, comprising Cotswolds, Shropshires, and Southdowns.

We then drove back, and crossed the river St. Lawrence to Quebec, the river being little less than a mile wide.

We took the train the same night for Montreal, and I availed myself of the comforts of the sleeping-cars. The pleasure of railway-travelling in Canada is far beyond what we are used to in England. The cars are built on the Pullman system. There are sleeping-cars, dining-cars, smoking-cars, and all have lavatory conveniences; and one can walk from the back car to the front while the train is in motion. We spent the Sunday in Montreal (a city of about 160,000 inhabitants), and explored the beautiful Mount Royal Park, whence the visitor has a good view of the city and the river St. Lawrence, with the Lachine Rapids in the distance, and the grand Victoria Bridge, with its twenty-four abutments.

I left by the Grand Trunk Railway *en route* for Ottawa on Monday, and travelled through an agricultural district occupied by French Canadians. There were some very good farms around Morrisburg station near Prescott. The country from Montreal to Prescott is rather level. I was surprised at the scarcity of sheep in this neighbourhood. The few I did see looked remarkably well and the appearance of the principal part of the land. light, sandy, and gravelly loam, indicated that sheep could be raised with advantage to the farmer.

After changing at Prescott, the train passed through some uncultivated land. A great deal of this forest was on fire for several miles, the smoke filling the air. Nearer Ottawa a change for the better was perceivable, and I saw some pretty-looking farm-houses and farms. Arriving at Ottawa I met my friend Professor Sheldon, who came round by steamboat. We went and reported ourselves to Mr. J. Lowe, Secretary of the Department of Agriculture. It was agreed that I should go through the Eastern Townships of Quebec, and then on through the Province of Ontario, Professor Sheldon going on to Manitoba. I stayed at Ottawa through the day, and in the afternoon went to see the saw-mills, at Hull, on the Ottawa River. We went over them, and it will repay one who is fond of machinery to inspect them. There are about 300 hands employed at each of the saw-mills in the neighbourhood, some of which are going night and day. They are driven by water-power of great strength. Close to these mills are the Chaudière Falls.

We also had a drive out through the country to the township of Nepean, county of Carleton, where a farmer had two farms for sale, with residences, barns, stables, etc., near church and chapel, and close to turnpike road—price for both, 7000 dollars. Drove back by the river Rideau, where a Scotch farmer has purchased a large farm. It looks very well; grows splendid swedes. He has had it well fenced.

On August 25 I left Ottawa by steamboat for Montreal. We had to change and travel by train for about twelve miles, owing to some falls in the river; then took to boat again, and were soon out in the St. Lawrence River, passed through the Lachine Rapids, under the Victoria Bridge, and arrived at Montreal.

I drove into the country along the upper Lachine Road to see Mr. Pennor's farm. He was not at home, so we did not go over the whole of it. There are about 200 acres. He had 20 very good Ayrshire cows grazing in one of the fields; they looked healthy. His mangels and swedes promised a good crop; the potatoes were also good, as well as beans and maize (or Indian corn), and, by the appearance of the stubble, he must have had splendid crops of oats and wheat. Around this neighbourhood there are splendid orchards in full bearing; the trees are allowed to head near the ground. They looked very healthy, and most of them were so laden with choice fruit that many of their branches drooped to the ground. We also drove to Mr. Joseph Hickson's, Côte St. Paul. He has just imported some very fine Herefords, Aberdeen polls, or Galloways, and has a few good shorthorns; also an excellent show of poultry of several kinds.

We next went to Sherbrooke. On the way there are some very good farms, especially between Montreal and Acton stations, farmed principally by French Canadians. Sherbrooke is a nice city of about 5000 inhabitants, containing cloth and other mills. I stayed there two hours, then took the train for Eaton. The land in this district is rather rough, much of it in a wild or forest state. Some of the timber—spruce, cedar, hemlock, and maple—is fine. On our way we met a gentleman from Toronto, who has just purchased 1040 acres of timber land near Lake Megantic. He seemed much pleased with his bargain. He was formerly from Yorkshire, England.

We left Eaton the same afternoon for Lake Megantic. This is a new line, and passes through a dense forest, which seems sometimes to darken the road. Settlements occasionally appear: one was called Bury, an English settlement; and another Scotchtown, a Scotch settlement; and I noticed some others. The town at the foot of Lake Megantic is called Agnes. Two years ago it was bush-land; now it contains four hotels, two stores, and several houses. The lake is about 12 miles long by 2 wide. Most of the land is taken up by settlers and speculators. I believe this place will become a great resort for visitors during the summer months. The lake abounds with fish, and, at certain seasons of the year, with wild duck.

We remained there over Sunday, and then returned to Eaton, in the county of Compton, where the Hon. J. H. Pope, the Minister of Agriculture, resides. He was in England at the time, respecting the completion of the Canadian Pacific Railway. He has a splendid farm of about 1000 acres, and capital barns and other buildings. I was introduced to his son, who drove me over the farm. I was shown lands that a few years ago were in a rough and wild state, and was surprised to see how quickly they can be brought into cultivation. The stumps of trees are not drawn until they become decayed (from six to eight years), when they can easily be got up. Meantime the lands grow good feed for cattle, and are called pastures. He called my attention to one of these pieces. After clearing away the stumps and once ploughing, it was put to oats last spring, and a yield of from 60 to 65 bushels per acre is expected. It was put down to clover and timothy, and looks very promising for a good crop next year. Two to three tons per acre, I have often been told, grow in this country; the second crop averaging from 1 to 1½ ton per acre. He has 200 hundred oxen and heifers, and generally brings out 50 by the 1st of May, and 150 by the 1st of August. It is very surprising, I was told, how quickly they fatten on the clover pastures during the summer months. I noticed some very fine yokes of working oxen on this farm, and some good horses.

I was driven around the country and shown some cheap farms for sale. Farms in this part can be bought from £3 10s. to £6 per acre, with dwelling-house, barns, and other buildings, and good water accommodation. Each farm has its 'bush' and maple grove. The 'bush' is a portion of the forest left for fire-wood and for building and repairing purposes. Sugar is extracted from the maple-tree, which grows in this country. They tap the trees in the spring of the year by boring a hole into the stem, and hang a bucket or similar vessel under it to catch the sap.

We left Eaton by rail for Sherbrooke, and drove to the Hon. J. Cochrane's estate, at Compton. This is one of the prettiest villages I have seen in this part of the country. We halted at Compton a short time, and visited the blacksmith's shop and the carpenter's and wheelwright's shop. The blacksmiths' anvils are erected on higher blocks than in England, and the men stand more erect at their work; at the carpenter's shop a new farmer's waggon was being made. The carriage and wheels were put together very well; the weight was about half a ton. About a mile further and we came to Mr. Cochrane's farm, situated on one of the ranges of hills that abound in this part of the country; the hills seem as fertile as the plains—indeed, the apple trees thrive much better on the hills than in the plains. We drove in through a fine gateway. He has a pretty villa-shaped house, the lawn being on our left-hand and the conservatory and garden on our right; then through another gate and we came upon the barns, stables, cattle-sheds, and other buildings, around a large yard. The farm is called 'Hillhurst,' and some of the cattle take their name from it. It was purchased by Mr. Cochrane about 15 years ago, and

contains about 1100 acres. Mr. Cochrane received us, and we inspected his cattle, sheep, pigs, etc. The cattle need no comment from me. They are well known, and show what can be done in this country. I took a note of some of the animals. A dark roan shorthorn cow, 10th Duchess of Airdrie, is a magnificent creature, and was purchased by Mr. Cochrane from England, at a cost of 2300 guineas, but has given him good returns. In the autumn of 1877 he sent a consignment of 32 head of cattle to England, where they were sold by Mr. Thornton for £16,325 8s. Two realised respectively 4100 guineas and 4300 guineas, the latter price being paid by the Earl of Bective for the 5th Duchess of Hillhurst, and the former by Mr. Loder for the 3rd Duchess of Hillhurst. These two cows were descended from the celebrated cow, 10th Duchess of Airdrie. Her last calf, a splendid creature, dark roan, calved April 6th, 1880—weight, 500lb. ; sire, 3rd Duke of Oneida. He has many other fine animals, particularly two bulls, one a dark roan, Duke of Oneida, nine years, and a dark red, Duke of Oxford, five years. Mr. Cochrane is about to start breeding in the North-West Territories, and is importing a stock of Herefords as a foundation for his herd. I was surprised to find this valuable herd grazing on the pastures, and but little high feeding indulged in. The most remarkable feature of the herd is the good health maintained. The swedes and mangel on the farm are very good. He said he had just thrashed some of his wheat, which yielded nearly 30 bushels per acre. After driving back to Sherbrooke, a distance of 18 miles, we took the rail to Stanstead. Next day we went through the country. Near the town are some nice farms. I noticed one for sale—100 acres, close to a good road, with brick dwelling-house, good barns, and water—price 5000 dollars. Then we drove on to Barnston, about 12 miles from Stanstead. I thought this district was equal to Mr. Cochrane's. I went over a farm for sale—420 acres, about 300 cultivable, the rest bush, or timber-lands—price 7000 dollars ; I should say the dwelling-house on this farm is rather small, but the barns and yards are very good, so is the water. Next morning we drove to Lake Magog, a distance of 20 miles through much uncultivated land. Magog is a very nice little town. The lake abounds with fish. The Hon. G. G. Stevens, M.P., very kindly drove us around the country. Some of the farms looked very well, others rather rough. We called at a farmhouse in the evening. The farmer, his wife, and daughter were sitting in their rocking-chairs under the verandah, enjoying the cool of the evening. He had some capital Indian corn ; two of the cones I brought home with me. This farmer, like many others, seemed very proud of his place. He showed us round his buildings, the gardens, and orchards.

The land in the Eastern Townships is principally undulating. That portion under cultivation is very fertile, and good crops of cereals, roots, fruits, and vegetables are produced. Its suitability for cattle-raising is demonstrated by an inspection of the herds of the Hon. Mr. Pope, Hon. Mr. Cochrane, and many others I could mention. The scenery is very beautiful, and the district contains much wooded land. Farms, including the necessary buildings, can be purchased at from £4 to £10 an acre, while bush-land can be bought from the Government of the Province at from 1s. 9d. to 4s. per acre.

I then left the Eastern Townships for Toronto, the capital of Ontario, distant from Montreal about 330 miles, and on the way met some cattle-trains laden with beasts for the Montreal markets. The greater part of the country from Montreal to Toronto is level. There are some very nice farms near Kingston, where I stopped during the night. I was shown round by the Government agent. Phosphate of lime is found here and in other parts of the country. It is very much used as a fertiliser.

Toronto is a very fine city facing Lake Ontario, containing splendid buildings and long streets. The Exhibition was just commencing, and lasted twelve days. The Grand Park, in which it was held, is situate about one mile from the town by the car road, or two miles by boat. The exhibits in the central building put me in mind of the Exhibition in London in 1851, on a small scale. The grounds were well laid out for the accommodation of the cattle, sheep, pigs, machinery, implements, and for the dogs and poultry exhibited at the show. The horse-ring for the trotting races and other purposes was of good size—three times round to the mile. The horses as a class were good ; the cattle were excellent, and quite equal to any that I have seen at our district shows in England. I was much attracted by a Durham ox which weighed 2800 lb. ; a four-year-old heifer of the same breed weighed about a ton. There can be no doubt that during the past few years cattle raising has become an important industry in this province, and its growth has been very rapid. In 1878 only 18,655 cattle and 41,250 sheep were exported to Great Britain, while the exportation during the present year (up to the end of November) has been : cattle, 49,650 ; sheep, 81,543. The breed of the cattle, too, is improving.

The fruit show was better than any I have ever seen ; apples and pears grow in abundance in this province, as well as peaches, grapes, and plums.

A few words on bee-farming will doubtless interest my readers. The largest exhibitor at the show was Mr. D. A. Jones, of Beeton, County Simcoe. He has several hives of bees, and has recently been importing from Cyprus and Palestine with a view to improve his stock. Last year he sold 7500 lb. of honey, the wholesale price of which was 12 cents per lb., and also further quantities at retail prices which I did not ascertain. I spent five days at this show, and enjoyed it very much ; but it would enable visitors to take a far greater interest if catalogues, giving particulars of the exhibits, were prepared and sold, as in this country.

While at the show I was invited to inspect a farm about twenty-eight miles away. It was about 400 acres in extent, nearly all cleared, well fenced, and with about twenty acres of young orchard. The soil is a rich sandy loam. There is an excellent dwelling-house on the farm and good out-buildings, one barn fitted up for tying fifty head of cattle, and there is also stable-room for nine horses. The farm is situated only one-and-a-half mile from a railway station, and two miles from Lake Ontario. The price asked is £14 an acre.

I also visited another farm, four miles from Toronto. The owner came from England some forty years ago with another gentleman; when they arrived at Toronto one had £11, while the other had to borrow money to carry him to the end of his journey. Now one has two farms of 180 acres each, in a good state of cultivation, and has just purchased a little property near Toronto, and erected a nice villa-residence, where he intends to spend the remainder of his days; the other owns a farm of 100 acres.

While at Toronto I of course took an opportunity of visiting the Niagara Falls, which form a very grand sight.

From Toronto I went on to Hamilton, a city of about 35,000 inhabitants. While at this place I came across a relation of one of my neighbours, who was very pleased to see me.

While driving through this district I was much struck with the abundance of fruit grown, and its excellent quality. The apple trade is rapidly becoming an important industry in the Province of Ontario, and large quantities are shipped every year to England, and I am told yield a very good profit.

I also visited a farm in the neighbourhood of Burlington and Oakville, containing 166 acres of land, including 12 acres of bush and 12 acres of young orchard. There is a good residence on the land, and the price asked is 70 dollars an acre.

From Hamilton I took the train to Paris, County Brantford, and then drove for about nine miles through a beautiful farming country. There are many sheep kept in this district, and they looked remarkably well. There is plenty of water, and the Grand River runs through Paris. About two miles from Barford, Mr. Townsend, Deputy Sheriff of Hamilton, has a nice farm for sale. There are about 200 acres, and a small river runs through a portion of the farm. The price is 60 dollars an acre.

I also went through the districts of Chatham, Woodstock, Ingersoll, and London, all splendid farming districts, and in fact called by some the garden of Canada. The price of land ranges from £10 to £14 an acre, including the building and fencing. This country produces excellent crops of cereals, as well as roots of a larger kind than are grown here; and while mentioning this I cannot do better than quote an article I recently saw in the *Irish Farmer* bearing on the question:

EXHIBITS OF CANADIAN PRODUCE AT THE SMITHFIELD CLUB SHOW.

'There was not, perhaps, at the late great annual show at Smithfield a more interesting exhibit than that of the Canadian produce to be seen on the stand of Messrs. Sutton and Sons. In our opinion, it went further than volumes written by travellers and farmers' delegates towards indicating the capabilities of Canada, and its newly-acquired North-Western Territory (Manitoba), which has been so much spoken of the past two or three years, and completely refuted the statements one occasionally sees in print made by interested parties, that it is not a desirable colony for the British farmer to go to with a view to settlement. Having repeatedly in these columns and elsewhere advocated the advantages British North America possesses over other English colonies for farmers and others of both large and small means to emigrate to, we were naturally pleased to see our statements receive such positive confirmation in the display made on this occasion. The samples included in this collection were gathered for Mr. John Dyke, the Canadian Government Agent at Liverpool, who made a tour through the Dominion last autumn, by the Winnipeg (Manitoba) Agricultural Society, and the Ontario Root Growers' Association (Toronto), and included some of the most wonderful specimens of agricultural produce ever exhibited on this side of the Atlantic.

'The most remarkable exhibits in this collection were some Long Red mangels, the heaviest of which weighed 73 lb.; Yellow Globe ditto, 58 lb.; citrons, 33 lb.; field pumpkins, 37 lb.; and a mammoth squash, 313 lb.! The latter was sown on 1st May, and cut on 6th of October, thus showing an average growth of something about 2 lb. per day. We have taken some trouble to learn how this weight compares with some of the heaviest squashes or pumpkins grown in England, or even on the Continent, and find that it is more than 100 lb. heavier than the largest grown in Britain that we have any published record of, and 70½ lb. heavier than any grown on the Continent. *Loudon's Magazine* contains the record of the heaviest grown in England, this was produced in the gardens of Lord Rodney, in the year 1834, and weighed 212 lb. On the Continent we find that a market gardener near Orleans showed in 1861 a larger and heavier one than this, which weighed 242½ lb.'

'The mangels were the most wonderful specimens, as regards size, ever seen at any exhibition, and in all probability were also the heaviest roots ever grown. They were wonderfully symmetrical in growth, and, considering their great size, exhibited very little of that coarseness usually

seen in large roots. Some of the turnips weighed up to 28 lb., and were firm and cleanly grown. In addition to the foregoing there were also on view parsnips and carrots, proportionately large, and of prime quality, potatoes and grain, all of which indicated in the most forcible manner the wonderful fertility of the soil they were grown in. They also proved how well adapted the climate is to bring to the highest perfection (even higher than can possibly be attained by the best system of farming in Britain) every class of crop usually cultivated here, and many besides which we cannot attempt to grow. With such a soil and such a climate within a little over a week's sail from our shores, we cannot help regretting that many more of our struggling farmers have not ere this taken possession of portions of it, and thus freed themselves for ever from the numerous acts of injustice they are constantly being forced to submit to under the iniquitous land laws of this country. No better evidence could be adduced of the fertility of the soils of Manitoba and Ontario than the exhibition of their produce as arranged at Smithfield by Messrs. Sutton and Sons.

'The Canadian Government acted wisely in causing such an exhibition to be made; and proved, beyond doubt, to the thousands of agriculturists who witnessed it, that to farm successfully, and grow as fine crops as it is possible to cultivate, it is not necessary to go beyond the protection of British rule, nor travel further than from 10 to 14 days' journey from home.'

While at Chatham I went to see several hundred acres of prairie land at a place called Dover West. It was recently regarded as quite useless for agricultural purposes, but it has been bought up and drained. The spot was formerly nothing but a swamp, but the soil, a rich black loam, turned out to be of surpassing richness, and grows excellent crops of all kinds. There are about 2700 acres of it altogether, 1200 of which the proprietors mean to farm themselves, and the remaining 1500 they want to sell. Application can be made to Messrs Fuller and White, barristers, St. James Street, Hamilton. Chatham is the centre of a much newer country than most of the other places I have been in. The soil is very rich, and consequently they grow wheat for several years in succession. Indian corn also thrives well. Farms can be bought at from 40 to 60 dollars an acre.

Round London the country is very level, and some rich pastures are to be found. This district seems to possess the necessary advantages for stock raising on a large scale. A good deal of the land would be improved by better draining, and this will no doubt be done before very long.

At Deal Town we called at Mr. Anderson's farm, situate on the banks of Lake Erie. He has about 200 acres, and was busy putting in his fall wheat. He has a beautiful apple orchard laden with fruit, and also one of the finest peach orchards I have seen. The trees are planted about 12 feet apart, and grow almost as high as the apple trees.

On my way from Chatham to Windsor the train ran through a swamp near Lake St. Clair, said to be 50,000 acres in extent, which will doubtless be drained in some future time, and will become valuable land.

I returned to Hamilton to have a look at the exhibition which was being held there. It resembled the Toronto show very much; indeed, many of the articles exhibited did duty at both places. The show, as well as that at Toronto, was visited by a large number of people, trains coming in from all parts of the country, but the farmers in the neighbourhood either drove or rode to the exhibition. I noticed one farmer three mornings in succession come in his buggy, driving a pair of splendid dark greys with mounted harness. I thought if some of our farmers in England were to come out in that way they would get talked about a bit, and probably get their rents raised; but the great number of farmers in Canada are their own landlords, and have no rent or tithes to pay.

There is very little distress in the country, and everybody seems to be getting on well. Of course there are some poor people, but nothing like the distress that is apparent in England. There are no poor-law or workhouses. The principal tax is the school-tax, but this is very light and no disadvantage to the farmer, as his family are educated free of cost, and indeed receive a very useful and thorough education.

On my way from Perth to Newry I unfortunately overslept myself, and was carried past my destination, so that I had to walk back about four miles to the farmhouse I was going to visit. However, I got a lift which took me three miles on the road. The man I went to see left England seventeen years ago on account of some dispute with his landlord, who gave him notice to quit his holding. He then sold out, and left England for Canada. He now has a farm of his own (with a nice dwelling-house and building) of about 100 acres; he also owns two other farms of 100 acres each, occupied by his sons. The soil is a rich sandy loam, and very fertile. He is very glad he emigrated, and expressed great doubts if he would have succeeded so well in England.

I made my way back to Toronto, and from there to Ottawa, where I again met Professor Sheldon and saw Mr. Lowe, the Secretary of the Department of Agriculture, and Sir Alexander Galt, at whose suggestion we started for a tour in the maritime provinces, comprising New Brunswick, Nova Scotia, and Prince Edward Island.

During the journey I met two ladies, one of whom, Miss Macpherson, is widely known in connection with her endeavours to improve the condition of destitute boys and girls in London.

They are sent out to the Home at Galt, in Ontario, where they receive a good education and are brought up as farm-labourers and domestic servants. Her work deserves every encouragement.

On our way we passed through the Province of Quebec, chiefly occupied by French Canadians. The scenery was very grand, the autumnal tints of the maple being gorgeous, and mixed with the dark-green foliage of the pines and spruce, form a very attractive feature in a Canadian landscape.

At length we arrived at Moncton, in New Brunswick, and after staying there we went on to Shediac, where we embarked on board a steamboat for Prince Edward Island, distant about forty miles. We landed at Summerside the same day, and owing to an agricultural show that was being held we had much difficulty in getting accommodation for the night.

The next morning we drove to Mr. Laird's farm, one of the largest in the island. It contains about 400 acres well cultivated. He stated that his wheat crop was not so good as last year, but averaged forty-five bushels per acre; oats grow exceedingly well in the island, and often weigh 44 lb. and over to the bushel. We then went over the farm of one of his neighbours, and were shown his wheat and oats. I asked him what profits a farmer could make off 100 acres, and he took me on one side and pointed out three carriages. One was a light carriage for two passengers, a heavier one for four, and the other a covered one. There were also three sleighs very nicely got up. I remarked that they seemed to eat and drink well and enjoy themselves, and he replied that they did so, having the opportunity.

We left Summerside for Charlottetown, the principal town in the island. Its population is 12,000. I suppose there are not many places without a disadvantage, and this will apply to Prince Edward Island. If a month were taken off the winter season and placed on the summer, it would, I think, be one of the finest places in the continent of America. The climate does not, however, seem to make much difference in the growth of the crops and vegetables, neither does it interfere with the breeding and fattening of the cattle.

While at Charlottetown an agricultural show was taking place; and some of the cattle were very good, but others were hardly fit for public exhibition. Sheep evidently do well in the island, and some fine specimens were shown. It is noted for horses, and some fine animals were on view. The climate seems to be a very healthy one, judging by the appearance of the people whom I met. We had only intended to stay a day or two in the island, but prolonged our visit at the request of several of the leading people. I went to Souris, a quiet little town on the east side of the island. I passed through several hundreds of acres of untilled lands, consisting, seemingly, of very rich soil.

Prince Edward Island is the nearest land to England. The rivers and the coast abound with fish, and there are plenty of wild-fowl; shell-fish also abound, and are sold at very low rates. The soil throughout the island seemed to be of one kind—a red sandy loam—and the country resembles England more than any other part of Canada I visited. It is about 140 miles long, and varies in width from 8 to 40 miles. Large numbers of sheep and cattle are exported to England, and also oats. Government lands, of which there are only a limited quantity, can be obtained at from 2 to 4 dollars per acre, while improved farms cost from 20 to 60 dollars per acre. So far as I could ascertain, the taxes amount to from 5 to 15 cents per acre. In the beds of most of the rivers and bays there are great quantities of decomposed shell matter, varying from 4 to 15 feet in depth; it is called mussel-mud, and has, no doubt, accumulated for centuries. The farmers get it in the winter-time and put it on the land, its value as a fertiliser being very great.

We took the steamboat to Pictou, and went by train from there to Halifax, Province of Nova Scotia. For the principal part of the journey the country looked very rough and sterile, but the fact of the district being a mineral one will probably account for this. Large quantities of coal are raised in the neighbourhood of Pictou, and are shipped to other parts of Canada and the United States. Round Truro the country looked better, and at Windsor I noticed some very excellent farms. Halifax is a fair-sized town, and is the winter port of the Dominion of Canada. There is said to be much gold in the province, and we were shown large blocks of quartz, which seemed to be very rich in the precious metal.

From Halifax we went to Kentville, passing through a romantic country, some of it as wild as nature had left it. Arrived at Kentville, which is situated in the famous Annapolis Valley, we drove to Cornwallis, and passed through some rich grazing land. Cornwallis is situated on a range of hills stretching out to the sea. Each farm slopes down to the valley, and has its share of what are called dyke-lands, *i.e.*, lands which have been reclaimed from the sea. These dyke-lands are exceedingly valuable, and the deposit which is left upon them each year by the overflow adds greatly to their value. I was told that they yield wonderful crops of hay. After it is mown the farmers turn their cattle out into these meadows to feed, the numbers being settled by the quantity of land they own. This district is the great apple-growing country of Nova Scotia, and I was surprised to see such splendid orchards—equal to any I had seen in Ontario, several hundreds of miles away. The apples are largely exported to the English market, and fetch a very good price.

After leaving Kentville we went on to Annapolis, the centre of the district of that name,

possessing considerable reputation on account of the fertility of its soil, the abundant crops of cereals, and yield of fruits. Annapolis is a quiet little town, but is splendidly situated, and I cannot conceive a better place for gentlemen of means, who may be wishing to retire from business. Game abounds, such as woodcock, snipe, plover, and duck, while moose-foxes and hares sometimes afford good sport. In addition, there is excellent fishing. There is much marsh and intervale land in this locality, and I noticed many stacks of hay, containing from one to two tons each, upon stages, under which the water would of course run when the lands are overflowed. We left Annapolis for St. John, New Brunswick. There is a very fine market-place in this city, 400 by 120 feet, which I visited. It was supplied with beef, mutton, pork, poultry, and fish in abundance, besides game and vegetables. Quarters of lamb, fit for any table, were selling at 6 cents per lb. New Brunswick is famed for the flavour of its mutton. The beef is not so good, being rather tough, although I cannot see any reason why beef should not be raised in New Brunswick, and other parts of Canada, equal to any in England. The city was nearly totally destroyed by a fire in 1877, but the greater proportion of it is now built up again, and is a striking evidence of the energy of the people.

I had an introduction to the American Consul at St. John, who was very pleased with the country, and had an intention of buying some land in the province.

While at St. John we took a trip up the Grand River to Fredericton. We passed a large extent of the rich intervale lands which receive the overflow of the river every spring, and consequently get the benefit of the rich alluvial deposit which it left behind. The uplands, too, are very fertile, principally of sandy loam. I noticed several farm-houses which had a good appearance, and it is stated that apple, pear, and plum trees are being extensively cultivated. Farms, with buildings, fencings, etc., can be purchased very cheaply, and at prices which would seem ridiculously low in this country, namely, from 20 to 40 dollars per acre (from £4 to £8).

While at Fredericton we had the pleasure of an introduction to the Lieutenant-Governor of the Province, the Hon. R. D. Willmott.

We had an opportunity of driving across to Gibsontown. We saw Mr. Gibson (after whom the town is named), who is the proprietor of large saw-mills situated on a river which flows into the St. John. This gentleman is a self-made man, like many others I met. As the saying is, he rose from nothing. Now he has a splendid house for his own use, another for his son, and a little way off are dwellings for his foremen and clerks, and cottages for his workmen, showing that he does not forget his employés in his own success. A new grist-mill has just been erected which is turning out large quantities of flour every day. Mr. Gibson has also erected a church at his own expense. Mr. Gibson started work with no capital but an axe, and has risen up from an ordinary workman to his present position. To give an idea of his wealth, and to show what may be done in the country, I was told he recently sold his interest in the New Brunswick Railway for 800,000 dollars, or £160,000.

From this place we took the train to the Grand Falls, passing many nice farms, and at times through dense forests. There was an agricultural show the day before we reached there, but the management detained the productions until our arrival in order that we might be able to form an idea of the exhibits. I cannot speak in disadvantageous terms of any of them when all were so good. I was especially struck with the enormous size of the vegetables, particularly the potatoes and cabbage. I also noticed some specimens of blankets, etc., woven by the farmers' wives and daughters; and the butter I saw was also exceedingly good. While at the Grand Falls we visited the new Danish settlement, about twelve miles distant. They were having their little show, too, on the day of our visit; but it was a very primitive sort of affair. These people settled here some years ago, most of them with only a few dollars each. Each family or adult obtained a Government grant of 100 acres of this forest land. When the timber is cleared they plant and grow their crops between the stumps, and the soil being a rich sandy loam and very fertile, giving excellent crops. The cattle on show were tied to the stumps of the trees, and the sheep and pigs in peculiar sort of pens. Inside the shed which had been put up were exhibits of produce. The exhibitors were continually calling me aside to look at the wheat, barley, oats, carrots, and cucumbers, some of which were six feet long, and many kinds of vegetable marrow. In fact, they seemed very proud of their exhibition, and considering the way in which they had started, and the ground they had to work upon, covered as it was with forest, it must be admitted that they have done very well. We next took train for Woodstock, and on our way visited a large farm, which was for sale. It contains about 800 acres, with over half a mile frontage of the river, and 200 acres of it are cleared. The farm-house is small, and there are two barns. I walked over it and inspected the land, which was very rich, being a nice light loam, with very little sand in it. I thought it would make a magnificent farm when all was cleared, especially considering the facilities for transport. The price was 9000 dollars. I took a tour through this district and found that farms generally could be bought at from 15 to 20 dollars per acre; the soil is deep and good, and is well watered.

Round Jacksonville orchards are very numerous, every cottage having fruit-trees round it, more or less. We were informed that there are thousands of acres of land in New Brunswick just as good as that which I have described, waiting for people to cultivate it.

Arriving at Woodstock we went to inspect the ironworks, which it is expected will be a suc-

cess. The district of Woodstock is much noted for the apples and plums which grow there. We then made our way back to Fredericton, to look at another farm for sale, about 9 miles from that place. It was about 600 acres in extent, with some rich pastures, some of which I thought was as good as any I had seen in England. A portion of it is intervale land. There is no farm-house on this farm, but good barn accommodation. I was told it was to be sold at a very low price, but I did not ascertain the figure.

We went on to St. John, and thence started for Sussex, on October 25th. It was rather cold, but the weather was brilliant. Nearing Rothsay we came in view of the river Kennebecassis, on which the great oarsman Renforth died a few years ago. It is a noble river, and has great facilities for yachting, boating, and the like. Upon the picturesque hills which line its banks are many pretty villa residences and rich intervale lands. While at Sussex we visited Mr. Arton's farm; he has 30 cows in milk. We also saw Mr. McMonikale's Ayrshires. He has a fine one-year-old Jersey bull, and a stud of 22 horses. We also inspected the farms of Major Arnold and Mr. Fairweather.

We then went to Sackville through the Tantramar Marsh. It is about nine miles long by four miles wide, and there are others adjoining it. The land forms very rich pasture and yields immense crops of hay, and seemed to be well adapted for grazing purposes. The value of these lands (and I do not think I have seen better in Canada) varies from 50 to 150 dollars per acre. At Fort Cumberland we inspected Mr. Etter's farm, in Westmoreland parish. We were shown a pair of steers bred from the Government-imported bull 'Barrington'; they weighed about 2500 lb. each; they had been grazing on the marsh lands.

On our way back to Sackville I called at Mr. Josiah Wood's farm. He has about 350 acres of this rich marsh land, and tells me that from 11 acres of swedes he expected to have 10,000 bushels. He sells from 150 to 200 tons of hay every year; he has 50 capital three-year-old steers in one herd, and said he was going to buy 40 more for winter grazing. While in this neighbourhood we went to see Mr. Woodman's farm. Mr. Woodman is also one of the largest timber merchants in the country, but is also a practical farmer. His piggeries were very well constructed, and he had several fat pigs.

We then made our way to Quebec, and took passage for home on board the steam-ship *Moravian*, of the Allan Line. The trip was a very enjoyable one, the accommodation being excellent.

CONCLUSION.

In concluding my report I wish to say that from my experience and from what I was told on good authority, the climate of Canada is hotter in summer and colder in winter than that of England. The people seem to be very healthy and temperate in their habits, and I consider the climate to be a very suitable one for Englishmen. The inducements to a British farmer to settle in Canada are far greater than they used to be, for they need not now go through the hardship of clearing the forest, as improved farms can be bought at such moderate prices. For those who wish to make their own farms, free-grant lands can still be obtained in Ontario, Quebec, New Brunswick, Manitoba, and the North-West Territories. Government lands can also be bought in these districts for small sums. The number of farms for sale is accounted for by the fact that most of the owners obtained the land practically for nothing, and by hard work have made them to be of considerable value; and they think there is a better chance of providing a competency for themselves and a good income for their sons in the fertile provinces of Manitoba and the North-West Territories, which are now being opened up. It may be said that the same thing will apply to the British farmer also: but it seems to me that Canadian farmers are more suited for pioneer life than Englishmen and the latter, in taking up lands in the older provinces, will find the life more like that they have been accustomed to, and they are suited to bring the soil into a proper state of cultivation which has in many cases been neglected.

I saw some exceedingly fine cattle in Canada, and some have fetched very high prices, particularly those raised in the province of Quebec by Mr. Cochrane, and those from the Bow Park Farm at Brantford, Ontario. The cattle trade is becoming a very important one in the older provinces of Canada, and if proper care is taken in improving the stock—and this appears to be receiving attention—I see no reason why she, with her large extent of land, should not step into the front rank as a cattle-exporting country.

My impression is that a farmer, with willing sons and daughters, wanting to improve his position, could make more in Canada in two or three years than he would all his lifetime under the present state of things in England. I do not mean to say he would get rich, but he would be able to live comfortably and get something that is valued quite as much, *i.e.*, independence. He would provide a home for his wife and family that is not likely to be taken away from them, and there is no question of raising rents or tithes. What I have said applies, of course, more particularly to the older provinces. Manitoba and the North-West I have not seen, and I leave any remarks on that district to my fellow-delegates.

Large quantities of cheese, butter, cattle, cereals, fruits, and eggs are being exported, and my reader will have noticed the quantity of honey one man has been able to sell.

Canada can truly be said to be a country of peace and plenty, and the scenes I met there are far different to those we see on this side. The country is gradually rising in importance, its finances are improving, and it has a vast extent of land, calculated to hold 200,000,000 of people, and yet at the present time the population only amounts to 4,000,000.

There can be no doubt that many farmers in Canada have not treated the land as it deserved, and it is surprising that so many should have succeeded under the circumstances ; but it shows what the soil is capable of, and that the climate cannot be injurious in its effect upon the agriculture of the country.

I cannot do better than conclude my report with an extract from an account of a tour made through Canada some thirty-one years ago, and which has in part been fulfilled, and is being more verified year by year ;

'A country so magnificent, a soil so prolific, water communication so abundant, and a people, moreover, in whose veins British blood flows, and who are in the possession of the principles, freedom, and laws of England safely planted in their soil, must rise to greatness and power. Our language, our institutions, and our religion will prevail. A mighty empire will rise up, enriched with knowledge and possessed of all the appliances of political power and wealth. We wish them well, they are our children, and in all future time and contingencies they will be our brethren. They will carry out and perpetuate all that is valuable in our system, and plant Old England on a new soil.'

THE REPORT OF MR. GEORGE BRODERICK,

Of Hawes, Wensleydale, Yorkshire.

'On Tuesday evening at the Board School Room, Hawes, a crowded meeting was held to receive a report from Mr. Broderick, in regard to the visit he paid to Canada, as the delegate of the farmers of Wensleydale, to inquire into the suitability of the Dominion for emigration. The matter is one of absorbing moment, as was shown by the extreme interest evinced on Tuesday night.

'Amongst the audience were a large number of young men, who perhaps considered the occasion as concerning them equally as much as the farmers, and rapt attention was given throughout to the remarks of Mr. Broderick. His report goes into minute details, which are very valuable indeed to all those who cannot make headway in the mother country, while agriculturists of all classes will glean information of a very serviceable character by a perusal of the report, which we produce *in extenso*.

'The chair was taken by Mr. Willis, who in the course of the evening took occasion to refer to the question of emigration. They would be, he felt assured, thoroughly grateful to Mr. Broderick for the pains he had taken in giving them correct information in regard to emigration. Certainly all would feel that falsification was given to the Malthusian theory that the world is over-populated, and would be convinced, he might almost say, that there was no danger of this over-population-of-the-world theory being corroborated by facts for thousands of years to come, while there were such large tracts of excellent land in Canada and other parts of the world to fall back upon. He had had some little conversation with Mr. Broderick before they entered that room, and had asked that gentleman whether he was satisfied with what he had seen, and the reply was that he was perfectly satisfied with the country he had visited, and was well pleased at the course that had been taken to secure unbiassed information. Lord Bolton's agent had also been out, and had gone over some of the parts of the country travelled by Mr. Broderick, and he said, "If you have a good situation in England, a comfortable farm, and are doing well, I would not advise you to go; but if people cannot get on in England, there is a very good prospect of doing well there." Mr. Grahame, the representative of the Canadian Government at Glasgow, would always be glad to give information to any one inclined to emigrate, and he (the chairman) would conclude by saying, "Look at the population we have in England, and the way in which people have to struggle to get on, while there is an excellent opening in Canada for men of spirit and enterprise, with a strong right arm and willing to work."—*Darlington and Stockton Times*, December 25, 1880.

Mr. Broderick, who was received with immense cheering, then said:—I have come to the most difficult part of the task I undertook some five or six months ago, when you appointed me your delegate to go out and view the Dominion of Canada, and draw up an unbiassed report upon its fitness as a field for emigration. Before entering on my report, I wish it to be understood that I am reporting solely on behalf of yourselves and the British farmers generally, and not, as may possibly be imagined by some, for and in the interests of the Canadian Government or people. That Government invited the English farmers to send out delegates from among themselves to report for their own benefit and interests, and as such I have understood my mission. I may further state that there was no attempt on the part of the Government to influence my judgment. On the contrary, I was allowed the freest choice of the parts I should visit, and I just went where I liked. I make this statement because I have seen the Government accused by detractors of Canada of showing the delegates only the best parts and the snug side of everything. On account of the short time and space at my disposal in which to deal with so large a subject, I shall endeavour, as far as possible, to drop all personal narrative, and to dismiss description of the kind and hospitable manner in which I was everywhere received and treated, as irrelevant to the object of my report. I shall describe everything as near as I can, just as I saw it, good or bad.

I sailed from Liverpool on a beautiful evening, the 22nd of July, in the good ship *Sarmatian*,

of the Allan Line, and early on the 29th we passed the Ione rock, Belle Isle, and through the straits which lie between it and Newfoundland, and during the day sailed down the Gulf of St. Lawrence. The weather changed rapidly from a wintry coldness among the icebergs off Belle Isle to extreme heat on the St. Lawrence, which we reached the following day. The scenery along the banks of the St. Lawrence up to Quebec is very fine in places, but there is not much good land, a great deal being hilly, rocky, and covered with small wood, mostly fir. We arrived at the historic and picturesque City of Quebec on the 31st, and on the 2nd of August took the train on the Grand Trunk Railway for Ottawa. On our way from Quebec to Richmond on the south of the St. Lawrence we passed a great deal of very indifferent land, composed mostly of a thin soil on a light-coloured sandy subsoil, wooded with small spruce, larch, etc., with a good deal of scrubby underwood and a great abundance of wild raspberries. I did not see much settlement till we passed Richmond, between which place and Montreal the land is somewhat better. It is owned and cultivated by a French population. We arrived at Montreal about eight in the evening, and started again at ten o'clock for Ottawa.

Ottawa is the capital of the Dominion and the seat of government. It is a nicely situated city, mostly built of brick and stone. It is surrounded by a fairly good agricultural country, and there are iron and phosphate mines in the vicinity. At Ottawa the delegates all met Mr. Lowe, the Secretary of the Department of Agriculture, and it was there arranged that Mr. Sagar and Mr. Curtis should stay in Ontario, and that Mr. Irvine, Mr. Anderson and myself should go on to Manitoba and the North-West Territories, which we did. My report will, therefore, refer mostly to that part of the country, as I spent the larger part of my time there. We arranged to go by steamboat through the lakes, but on arriving at Toronto we found that we had a day or two to wait, so we filled in the time by going to Niagara Falls.

The land for a good way along the north shore of Lake Huron is settled, and is, I should say, fairly good land, but we could not see much of it. At the north end there are a great many islands, some of them very pretty, mostly wooded. We passed from Lake Huron through the River St. Marie passing the rapids into Lake Superior. The north shore of this lake presents a hillocky appearance, not very high, but rocky, and almost devoid of soil, yet covered by small pine-wood which appears to grow in the crevices of the rock. This class of country seems to prevail along the entire length of the lake except around Thunder Bay, where the hills are much higher, but still rocky and wooded. In Thunder Bay we called at Prince Arthur's Landing, a small town, and Fort William, the terminus of the Canadian Pacific Railway now in process of construction. There is some fair land about here, and there seems a fair prospect of a town growing up, as it is the nearest shipping port to Winnipeg on the new railway.

We arrived at Duluth, an American town at the extreme western point of Lake Superior, and took the train that evening on the Northern Pacific Railway. It was a mild warm evening, and before dark we passed some very fine and rugged scenery, through pine-clad valleys, over dizzy creaking wooden bridges, and rocky streams, the rocks set on edge instead of horizontally. We then got to a level country, and came to some swampy flat land, rather peaty, but generally covered with small fir and poplar. Sometimes in the wettest parts the fir trees were not more than five or six feet high, with only a little bit of green on the top, and the branches hung with grey moss. Where the land is drier the wood is heavier. There were occasional lakes, some with swampy shores, others closely fringed and overhung with wood.

We travelled all night, and in the morning I had my first experience of prairie land. We changed at Glyndon on to the Manitoba Railway, and in an hour or two got fairly out upon the prairie. Look where I would, there was nothing but an almost trackless extent of land almost as flat as a sea stretching away to the horizon, which formed a true circle all round us. There were a few settlements scattered all along: fields of corn and patches of ploughing without fences round them. Occasionally we crossed a sluggish creek, its course marked out by a winding belt of trees stretching away into the distance. I was told that we were in the Red River Valley, and the State of Minnesota. The railway runs in a straight line, and is formed by cutting a ditch on either side; the soil from the ditches is thrown into the middle, and on it are laid the sleepers and rails. The ditches show a section of the soil, which, although of good quality, is not equal to that of Manitoba. During the whole of that day we travelled over this unbroken flat. At night the sun set red in the west, and seemed to sink below us before it disappeared, and we appeared to be on the highest part of the land, though in reality it was quite flat. We arrived at St. Boniface about eleven o'clock at night, and crossed the Red River by ferry to Winnipeg.

The next day I devoted to an inspection of that now world-famed city. It is situated at the junction of the Assiniboine River with the Red River. Ten years ago there were only a few hundred people squatted on the place; now its inhabitants number ten or twelve thousand. If building goes on as fast as it is doing at present, it promises fairly to become a second Chicago before long. There are many very fine brick and stone buildings, and private houses. A good many fortunes have been made already, and there are many wealthy citizens. Building-ground that was ten years ago bought for a mere trifle per acre, is now selling by the foot at high prices. Thus in ten years a town has sprung up bigger and with more capital invested than all the towns of Wensleydale put together.

Before going further, it may be well to give a brief geographical description of the Dominion. As you know, it consists of the northern half of the great American Continent. The eastern part, or the provinces of Quebec, Nova Scotia, New Brunswick, and Ontario, has been pretty well settled upon for a long time. Settlement went on to the west of Ontario till it was stopped by a great barren rocky tract of land which stretches from about the east end of Lake Superior north towards the Hudson's Bay; and reaches westward perhaps a thousand miles, till it is cut off by the fertile Red River Valley, of which I have spoken. This valley is, perhaps, 200 miles wide in some places. It reaches from the great water divide of the continent which crosses Minnesota and Dacota to the Hudson's Bay, it is almost a dead level, and is supposed to have been an old sea or lake bottom. West of this again for nearly 200 miles, to the Pacific Ocean, lies a more or less fertile tract of prairie land, almost untouched by white men. Thus, you see, the country is, agriculturally speaking, divided into two distinct parts.

From the older provinces of Canada, as well as from the Eastern States, for various reasons, there has been for a long time past a constant tendency on the part of many of the settlers to emigrate to the great Western prairies, and, as the great fertile prairies of North-West Canada were not generally known or accessible to the public, they were obliged to go to the Western States. And hence the idea got abroad that the Canadians were dissatisfied with this country, and were going to the States; but in reality there were as many leaving the Eastern States for the same reason. It is only within the last ten years that the British North-West has been brought prominently before public notice, and since that time quite a new state of things has set in. Numbers of Canadians are selling their farms and going there instead of to the States. A great many are going from England and Scotland, and even from the United States themselves. A railway has been made from the Northern Pacific Railway to Winnipeg, and another great railway, called the Canadian Pacific, is in process of construction, and will soon be made through to the Pacific coast, thoroughly opening up an immense tract of country; several branch railways are also being surveyed. The result is, and is likely to be for a long time to come, an immense influx of immigration.

To return to my travels. I first went down the new Canadian Pacific Railway to Cross Lake —the end of the line opened about 100 miles east of Winnipeg. For a good distance the land is good, but rather wet. Before we arrived at Cross Lake, we had got right into the barren rocky country I have before referred to. It is not absolutely barren. There are patches of fair land that may at some future time be sought out. There is a good deal of timber, and, it is supposed, a great deal of mineral wealth.

At Winnipeg, Mr. Hespeler provided us with a team of horses and spring waggon, driver, and camping equipments, and we sat out for the West. We went by the Portage road along the north bank of the Assiniboine River. About Headingly, and for a distance of about thirty miles west, there is some very good dry land under fair cultivation. It is a thick black loam on a clay subsoil, and is drained by the Assiniboine and the numerous creeks that intersect it. After this we passed some twenty miles of swampy land, till we came to Poplar Point; and from there to Portage-la-Prairie, a distance of twenty or thirty miles, is, I think, about the best land I saw. It is no thicker or better soil, but is drier than most of the Red River land. It is mostly pretty fairly cultivated, and there were some really good crops of wheat and oats. We called and looked over the farm of Mr. Brown, a very nice man, who came from Ontario about eight years ago. He said one of his fields had been cropped seventeen years when he bought it. He grew the eighteenth crop, and it yielded 40 bushels of wheat per acre. The same field has not yet been manured, and this year had a fair crop of wheat. But he does not think his wheat has averaged quite 30 bushels per acre since he came. He thinks that by manuring, and with the high cultivation as practised in England, there would be no difficulty in averaging 40 bushels of wheat per acre. He had a few good roots, and a patch of clover which he sowed when he first came, and which has grown ever since; he thinks clover and timothy (our foxtail) will stand the climate very well. His soil is from a foot to two feet thick.

We went on to Portage-la-Prairie, and then on to Mr. McKenzie's at Burnside, where we stayed a day and a night. Portage-la-Prairie is a growing town on the Assiniboine, next in size to Winnipeg and Emerson, and is surrounded by very good land. Mr. McKenzie has some good crops, and keeps a large herd of cattle. They feed on prairie grass in summer and prairie hay in winter, and most of them were nearly fat. He has sometimes had as many as 200 cattle at a time, but has not lost a beast since he came. One spring he sold twelve fat bullocks that had been fed on nothing but prairie hay all winter. Speaking of prairie hay leads me to a description of it. My first impression of the wild prairie grass of the Red River Valley was that it was rather coarse, and what we should call sour. Where the land is dry it looks rather short, but on closer inspection it proved to have a considerable amount of good herbage amongst it. There is generally a great deal of yellow flower, giving it the appearance of a meadow full of buttercups. On the swamps and wet land it is certainly coarse, yet many people mow it for hay because the yield is heavier, but I did not think it nearly so good as hay off drier land, and in this opinion I was supported by most of the best farmers. The quantity and quality vary very much in different parts. That part of McKenzie's farm which I saw is mostly dry, and on it there were some very good meadows, which might yield two tons of hay per acre. Cattle turned out

into these natural meadows have plenty to go at, and being good judges of land, choose the best herbage. This may account for their doing so well. Cows also give large quantities of very rich milk and butter on prairie grass. Mr. McKenzie sells most of his cattle to immigrants. Good two-year-old heifers, he says, are worth from £5 to £6. Cows from £6 to £10 each. Beef about 4d. per lb.

We were still in what is considered the Red River Valley, but after going about 30 miles west of McKenzie's, or about 100 miles west of Winnipeg, and crossing some swamp land, full of ponds, and willow scrub, and poplar, and over a bad road, we came to an abrupt rise, presenting every appearance of a sea beach, some 50 to 100 feet high; behind, and running parallel with this, is a belt of sand-hills, irregular in form, supporting very little grass, but with a few stunted oaks and pine, often half burnt through by prairie fires. In the hollows between these hills are occasional bits of good land covered with poplar, birch, hazel, etc. There are any number of hazel-nuts, wild cherries, wild rasps, and strawberries in their season. Among the brushwood wild hops and clematis twine in great profusion. On one of these patches Mr. Snow, a son of one of the delegates who went out last year, has settled.

Beyond this we crossed what is known as the Big Plain. It is of more or less sandy black soil, supporting very little grass; it is rather too dry, I should say, though it grows fair good crops of wheat and oats. There is here a good deal of free-grant land not taken up yet. After crossing some forty miles of this plain we came to what is known as the Rolling Prairie, from any point of which can be had an extensive view; it presents a kind of tumultuous, billowy appearance. In some places it is very hillocky and irregular. In others it is formed of gently sloping hills and hollows, ranging from a few hundred yards to several miles in extent, very like some of the midland counties of England; but through all its unevenness it maintains a kind of general level.

The particular part to which I am now referring, that between the Big Plain and the Little Saskatchewan River, about thirty miles across, is broken by an immense number of ponds. One could scarcely get a mile section without half a dozen ponds on it. The ridges are generally rich black loam, supporting fairly good grass; the hollows are either marshy sleughs or ponds, which could generally be drained one into another. I believe a single drain into the bottom of a sleugh would dry the whole of it, and if dry it would be almost unsurpassable land, as the fertility of the hillsides has been filtering into it for ages. Around the ponds there is generally willow scrub, and scattered about are small woods and clumps of poplar, giving the country a park-like appearance. On the ponds are almost innumerable wild-ducks. I have sometimes counted on small ponds two or three hundred, and I could scarcely ever look up without seeing some in the air. They are generally very tame, and I could have shot scores out of our waggon as we went along.

We next came to Minnedosa, a small place consisting of a few log-houses and stores, a stopping-house, a blacksmith's shop, and a saw and grist mill. It is about a year old. If the Pacific Railway passes through it, as its people hope, it may become a big town. There is a rival town called Odanah about a mile off.

From here we passed some fairly good land and pastures, then some widely undulating land, till we came to Little Shoal Lake, where we stayed all night.

Our road passed through a shallow corner of the lake, out of which a policeman was pulling large jack fish with a very rude fishing-rod. Around Shoal Lake there is some very good land, though rather broken by ponds and marshes. The scenery is very pretty and park-like.

From here we went west again over some very good land to Bortle, on the Bird Tail Creek, a young town in a rather deep valley, but surrounded by very good land, of which most of the best free-grant sections were taken up last summer. I saw here a cattle-dealer who had about eighty cattle for sale. He had nine pure-bred Galloways, a young bull, and eight cows and heifers, for which he asked £140. He was selling cows at about £10 each.

We next went forward to Fort Ellice, a Hudson's Bay Company station, on the Assiniboine Valley, about 250 miles west of Winnipeg. It is about the head of navigation on the Assiniboine River. The valley is here about 300 feet deep, a mile and a half or two miles across; the sides are steep, the bottom flat and very fertile, but apt to be wet. There is no rock in possession in the sides; the full depth seems to be cut through a bed of glacial drift composed mostly of rounded granite boulders and gravelly clay. The country all the way from Winnipeg is thinly settled, and there is a good deal of free-grant land not taken up.

We took a drive with Mr. McDonald, the chief factor of the fort, to the farm of Mr. Dawson, a few miles to the north. Mr. Dawson went out from Lincolnshire last year; he has taken up two mile sections of land, or 1280 acres, and splendid land it is. It is fine friable black loam two or three feet thick, gently undulating, and there is a great deal of wild tares or vetches among the grass which makes splendid feed. We went back to Fort Ellice, and there met Mr. Marcus Smith, the chief surveyor of the Pacific Railway. He has been six or eight times across to the Pacific Coast, and describes the land as being very fertile nearly all the way, and especially in the north and Peace River district. The climate, he says, is much milder towards the West Coast. Snow seldom lies long in the winter.

From Fort Ellice we went north to the Shell River, a tributary of the Assiniboine. The land all the way after we left the banks of the Assiniboine Valley is very good. There is very fine grass and a great deal of wild tares all the way. There was an almost continual downpour of rain all the day, and it was beginning to get dark when we came upon the camp of Mr. Rifenstine's company of land-surveyors, near a small stream, so we pitched our tent beside them. The cook had supper ready for them, and they presently made their appearance, all drenched. Mr. Rifenstine asked us to have supper with them, and I got some of the best soup I think I ever tasted. They described the land to the north as excellent, and said they had been among wild tares that day through which it was difficult to walk. About fifty families settled there last spring, though it is not yet surveyed. This tract of land which may be described as lying between the Assiniboine, the Shell River, and the Bird Tail Creek, is on the whole extremely good. It is of rich black loam, from one to three feet thick, and generally dry, but with occasional ponds. There is a fair amount of poplar-wood scattered about, sufficient for fuel and building purposes. Its rich meadows and fields of tares make it a likely place for cattle-raising, I should say.

We came back by Fort Ellice, and then down by a trail that runs nearer to the Assiniboine than the one by which we went. These trails are merely tracks over the prairies, made by the passage of carts and waggons, and are in some places very good and in others very bad. We made the acquaintance of Mr. Herchmer, a gentleman originally from England. He is the Government Indian agent. We went with him through two of the Indian Reserves. These Indians are of the Sioux tribe, and the Government have given them reserves of land, provided them with oxen and agricultural implements, and are trying to teach them to farm. Some have really nice plots of wheat, Indian corn, and all kinds of garden produce—some take extreme pains with their gardens, and have them very neat. Mr. Herchmer speaks highly of the honesty of the Indians when fairly treated. They are very loyal, and nearly always asked after the Queen. We camped one night near the lower reserve, and next day Mr. Herchmer left his tent and equipments till he came back at night. There were Indians all round, and they might easily have gone with the whole thing; but he said he was in the habit of leaving it there, and he had never lost anything, and said they were quite safe as long as there were no white men about. The land for several miles back from the valley is sandy and gravelly—liable to drought. On the alluvial bottom of the valley it is very good land, but mostly wet.

Our next stopping-place was Rapid City, a thriving young town about two years old, on the little Saskatchewan, lower down than Minnedosa and Odanah. There is good land all around, but rather broken. Most of the free grants are taken up. We next crossed the Assiniboine River at the Rapids, through Grand Valley, a tract of good land south-west of the river, and passed the Brandon Hills—some low wooded hills, but which can be seen from a great distance. We went on to Millford, a small place on the Souris River, a river that runs from the south-west to the Assiniboine, then up the south side of the Souris, and called on Messrs. Calendar and Reed, two young gentlemen from Edinburgh, with whom Mr. Imrie was acquainted. They have taken up some good land on Oak Creek. From there we went forward over some uneven hilly country, and past some very pretty lakes till we came to Lang's Valley. It is a long deepish valley with flat bottom, but not very much good land in it. There is only one settlement, that of Mr. Lang, after whom it is named. Immediately south of this valley is some very good land. We left the trail and went west over the trackless prairie on the Souris Plain. This country, as its name implies, is very level, and there is a large quantity of good land. I remember one piece between two creeks, a little beyond Lang's Valley, some six or eight miles square, or twenty or thirty thousand acres—good soil supporting good meadow-grass nearly knee-deep, and the whole of it might have been mown with a machine—or machines, I should say, as one machine would have been worn out long before it could have got through it all. The grass here is more like our coarser meadow-grasses without many flowers, or weeds as they are called out there.

After going west into the bend of the Souris, we turned south to the Turtle Mountains, and crossed an immense treeless plain of variable land. I noticed the deserted tracks of the buffalo worn deep in the soil by the feet of many generations of these bovine animals. The granite boulders, too, were polished on the corners by the buffaloes rubbing themselves, and there is a trench around them, worn by the tramping of their feet. The buffaloes are nearly killed out now, and their bones are plentifully scattered over the plains. Before we reached the Turtle Mountains we crossed an immense marsh, which surrounds White Lake at the foot of that hill. The Turtle Mountain is a long, gently sloping ridge rather than a mountain, but it can be seen a long way over the plains. There is some very good land on the slopes, and some good wood on the top. A great many settlers have gone into this district during the summer.

From here we went east by a trail running a little north of the United States boundary; we passed through the Rock Lake and Pembina Mountain districts, where there is a vast quantity of very good land, and many settlers. We got into the Red River Valley again, and passed through a Mennonite Reserve—very good land—and then on to Emerson, a thriving little town on the Red River, where it crosses the International Boundary. From there we went north, along the west bank of the river, over a great deal of very rich land of deep black loam, tolerably

dry and growing good crops, to Winnipeg. We had thus accomplished a journey of about 800 miles.

Mr. Imrie left next day to go to Nova Scotia, and I accepted an invitation from the mayor of Winnipeg and the premier of the province (Mr. Norquay and Mr. Walker) to go with a shooting-party to Meadow Lea, the then western terminus of the Pacific Railway. Our party had a special train placed at its disposal, and a special siding made at the terminus, through the courtesy of Mr. Ryan, the contractor. We had fair sport. On the way the road crosses some good dry land and a great deal of marsh. I met Mr. Cowlard, who went out from Cornwall, England, and has been farming out there about eight years. He considers that cattle-farming pays best. He had made butter all the summer, and put it down in pails; he was taking it to Winnipeg, where he had sold it beforehand for 1s. 0½d. per lb. Not so bad, I thought, where good land can be had for nearly nothing. I saw the *modus operandi* of Canadian railway construction, which is really wonderful. I have not time here to go into a description; suffice it to say that it was being put forward at the rate of nearly a mile a day with comparatively few men.

From Winnipeg the Hon. Mr. Norquay and Mr. Ross, M.P.L., drove Mr. Dyke, of Liverpool, and myself, down to Kildonan and St. Paul by the Red River side, then across the river to Bird Hill, a gravel hill, from which a good view of the surrounding country is obtained. Kildonan and St. Paul were settled by Scotchmen sent out by Lord Selkirk about 60 years ago. The land is very good and dry, but badly farmed as a rule. Some of it has been cropped for 50 years without manure—this I quite believed, as I saw the manure lying in heaps, of unmistakable age. Mr. McBeth, a gentleman of whom some of the delegates spoke last year, showed me a field off which he had taken 50 crops without manure, and which still continued productive, but he admitted that it would not grow the crops it did at first. He said he once reaped 48 bushels of wheat per acre off his farm.

To sum up then, before leaving this district—I considered the Red River land the most fertile. It is generally a soapy kind of black loam, and when rubbed between the fingers one cannot detect a grain of sand. It may average about 2 feet thick, and rests on a clay subsoil of indefinite thickness, which is really of the same character as the soil, but has not been blackened and mellowed by atmospheric exposure. This rule does not hold good all through, as there are places where it is more or less sandy, and in some places even gravelly and sandy. But a great part of the valley is marshy, and for really profitable cultivation requires to be drained, which means considerable expense, and on account of its extreme flatness it cannot, in many cases, very well be done by private individuals, and the Government are already making extensive drainage works. When the soil is too wet it becomes so sticky that the best steel plough will not clean itself, but when it is in proper condition it works very light and friable. But I must say that when the land is dry, as it is along the river banks and near creeks, it really cannot be surpassed for production. I believe that under a good English system of farming there would be little difficulty in growing 40 or 50 bushels of wheat per acre. However, when all things are considered I think I should prefer the Western prairies where you can pick land of rich black loam two or three feet thick, that is naturally dry, and can be worked in any kind of weather save frost. The natural grass out there, too, is of better quality.

Wood and water are things that an immigrant would require to consider. In some places, though this is generally only local, the water is alkaline and not fit for drinking purposes. This is most frequent in the Red River Valley. I have seen places where pools have dried that were quite encrusted with alkali looking like hoar-frost. But as a rule, fair water can be had by sinking wells ten or twelve feet deep, and in some places there are good springs. Wood is scarce in many parts of the Red River Valley and on some of the great plains, but along the rivers and in many parts of the prairie there is a sufficiency. It is a great desideratum to have wood on or near a farm, as it is the only fuel and building material available at first to the settler, though in some parts of the province they are beginning to build of brick.

As we are all grazing farmers here, and I was specially instructed to look to the cattle-raising interests, you may think I have dwelt too much upon corn-growing and arable cultivation of land; but I have found it absolutely necessary, as almost everybody, and especially those intending to take up free grants, must go into ploughing to some extent, since it is one of the conditions on which the land is granted, that thirty acres be brought under cultivation in three years; and to get clover and the cultivated grasses it is necessary to plough, and it will pay well to take a crop or two of wheat before sowing down. But it would be quite possible for a man to go into cattle-farming on the natural prairie grass, and if he keeps well to the front he can have the use of 1000 or 50,000 acres, if he likes. I have talked with many of the best farmers on the subject of cattle-farming, and they all agree that it will pay best for anyone who has sufficient capital to start it. The reason that this branch is so little gone into is because the great bulk of the immigrants are men without much capital. They therefore go to ploughing, as it does not require so much capital, and yields a quicker return. I believe that breeding horses would pay extremely well, that is, fair useful, though rather light, farm-horses, similar to what we have about here, and they are just about as dear. The Canadian horses are lighter than the farm horses used in most parts of England. On account of the great immigration which is likely to

continue for a long time to come, there will probably be a strong demand for horses, which will keep up the price.

I will give you a list of prices of cattle which was provided me by Mr. Burt, a horse and cattle dealer of Winnipeg: Fair grade two-year-old heifers, from £4 to £5 each; fair grade three-year-old heifers, spring down, £5 to £7; cows in calf, or with calves running with them, £6 to £10; working oxen, £20 to £30 per span; fair good horses, £20 to £30 each; ponies £6 to £15—average about £10. Beef is worth 3d. to 4d. per lb. in the carcase; mutton, about 5d. per lb.; butter and cheese, nearly as much as they are here; milk sells in the towns at 2½d. per quart. These prices agree with those given me by most of the farmers.

Government land (*i.e.* Railway lands) can be bought at from 4s. 2d. to £1 per acre, according to distance from the Pacific Railway. Good land near Winnipeg, Emerson, Portage-la-Prairie, can be bought at from £1 to £2 per acre.

Wages run about as follows: Good farm labourers, from £4 to £5 per month, with board all the year round, or £5 to £6 in summer and harvest time. On the railway works they pay 6s. to 7s. per day for good hands. Carpenters and blacksmiths get from 8s. to 12s. per day. Good bricklayers and plasterers from 12s. to 14s. a day. Blacksmiths charge 2s. 6d. a shoe for shoeing horses, and 1s. a shoe for resetting. All the labourers I talked with say that good men have no difficulty in getting work, but they have to work hard.

With regard to the capital required to make a start in farming, it is generally considered that a man with a clear £100 when he gets there can make a good start on the free-grant lands, and instances are not unknown where men have started without anything—they have taken up grants, built houses and cultivated a little to keep up their claim, and have worked for wages in the meantime. But I should certainly advise anyone to take all the capital he can lay hold of, the more the better, and if they have more than they wish to invest in farming, it can be let on good land security at 8 or 10 per cent. interest.

A settler will find difficulties to contend with during the first two or three years. After that, and when he has got accustomed to the country and its ways, he may live as comfortably as he can here. If he be a man without much capital and takes up free-grant land, no matter how good that land is, it is in the natural state without house or fences, and as there is really no money actually scattered about on it, it stands to reason that he cannot get anything out of it without spending a considerable amount of labour. There is a house to build, but this at first is built of wood, and is put up very quickly, especially if he can get a native Canadian or two to help him, which they are always ready to do; they understand building wood houses, and if they have the wood got to the place they will erect a decent house in a week. The first year he does not get much crop off his land, and he spends it principally in breaking, that is ploughing the sod up two inches thick in the spring, and backsetting about four inches deep in the autumn if he is going in for ploughing. If he is going to raise cattle he will be building sheds, stacking hay, etc. But when he has been on his farm three years, got a neat house and cattle-sheds, with a good stock or a lot of land under crop, he may live very comfortably, and will have no harder to work than here. His 160 acres of land that he got for a £2 fee, and his 160 acre pre-emption that he got for eight or ten shillings per acre, will in all probability be worth £1 or £1 10s. per acre, and thus he will have made £320 or more, independent of his crops, in three years. His land is his own absolutely, he has no rent to pay, and very light taxes. A man with more capital, of course, can do greater things. All this depends upon the man himself. If he is not prepared to face a few hardships and a little isolation at first, he will never like the North-West; but perhaps he would never like anywhere. A requisite quality to fit a man for emigration to Canada is the power of adaptability to circumstances. Everything is a little different to what it is at home, and there are many new things to learn. The best plan for an immigrant is to make the acquaintance of a few old farmers, who will teach him anything he requires.

One of the worst difficulties the immigrant has to contend with at first is the bad roads which in spring are very soft, and in some places almost impassable; but it must be borne in mind that there are no highway rates, and that as the country gets settled and divided into municipalities, the roads are sure to be seen to—now it is nobody's business. There is a great difference of opinion as to which is the best time of the year to go; early spring would be the best but for the difficulty of transit: but on the whole I think August is the best, at any rate for those that have money.

The occasional visits of locusts is a thing that requires mentioning, but there were none when I was there, and there have not been for about five years, and the farmers who have experienced them do not appear to fear them much, as their ravages are generally only local, and at the worst are not near so bad as they are in the Western States of America, their natural breeding-place. They are not at present troubled by the Colorado potato beetle, the weevil in wheat, and the pea beetle, which is found in the United States and Eastern Canada.

The weather, while I was there, was very pleasant on the whole, though the settlers all said it was unusually wet for that season of the year. The air was generally very dry, and I never enjoyed better health in my life. I was told that the winter commences in November and ends about the middle of April or beginning of May; it is generally continuous frost all through, and

occasionally reaches an extreme degree of cold. During last winter, which was exceptionally severe, the thermometer once or twice got down to about 48° or 50° below zero; but I saw a register which generally ranged from 10° above to 10° below zero. The summer comes on very quickly, and is hot enough to grow any kind of grain and root-crops, and will ripen tomatoes.

I find that I shall have to cut my report much shorter than I had intended. I intended to have gone into the details of sheep-breeding, which I believe might be made to pay extremely well. I might have spoken of the wild deer, the prairie chickens, and immense amount of game that I saw, and have described the Red River carts, which are made of wood, without a particle of iron about them. But I must proceed with my journey. I left Winnipeg on the 27th Sept., at about seven o'clock in the morning; and to give you some idea of the vast extent of the Red River Valley, I travelled all that day and night, and well into the next morning, in almost a straight line without noticing a rise of three feet all the way. I came by way of Chicago to Toronto in Ontario, where I stayed a few days.

I visited Hamilton, Brantford, and the Bow Park farm; there is some good land about there, which is nearly all cultivated. The land around Brantford and Bow Park especially is good. The chief feature of interest about Bow Park is the world-famed herd of shorthorns, about 300 in number. I think we have as good cattle in England, and perhaps in Wensleydale, as any they have. But the special feature of the Bow Park herd is their uniform high quality. Looking through their large and commodious sheds is like going through a show-yard. They have scarcely a failure in the whole herd. Their system of cultivation, too, is an example to the surrounding farmers, and shows what Canadian land can do. I believe good land with buildings can be bought in Ontario for from £6 to £15 per acre. I shall not dwell long on this part of the country, as some of the other delegates have been so thoroughly over it.

I next went on to Belleville, a small town on the Bay of Quinte on Lake Ontario, and was there shown over a cheese factory by Mr. Graham, the president of the Dairy Association. They make some excellent cheese there, and it was selling at 65s. per cwt. Mr. Graham thoroughly understands cheese-making. They have Dairy Associations in Canada, and each factory subscribes a certain sum of money, augmented by a subsidy from Government, with which they engage men to study the process of cheese-making, and go through the factories to give instruction. The factory at Belleville is worked on the co-operative principle; each farmer's milk is measured, and he receives a proportionate share of the profits of the cheese. The expenses of manufacturing amount to ½d. per lb., and the collection of the milk lays on another ½d. per lb., making the total cost 1d. Cheese-making at 65s. pays very well.

I next went on to Kingston, a town built principally of limestone, at the lower end of Lake Ontario. From there I went by boat down the St. Lawrence to Montreal. I went this way for the purpose of seeing the Thousand Islands and the scenery of the river. The Thousand Islands are at the head of the river or the foot of the lake, but their number is more like two or three thousand. They are mostly covered with trees, the foliage of which were in their bright autumn colours; some of the smaller islands looked like pots of flowers set in the water. Some of them are rocky, and the effect was very exquisite as we went winding amongst them.

Montreal is a city of about 150,000 inhabitants. It has some very fine limestone residences and buildings. The Windsor Hotel is almost equal in finish to any in the world. One of the chief features of Montreal is Mount Royal, a high hill that stands up almost perpendicularly behind the town. From the top a view in every direction for 100 miles can be had; it is a public park.

I went on to Compton, in the Eastern Townships of Quebec. It is rather a pretty country, and there is some good land. I visited Senator Cochrane's farm, and saw his celebrated herd of shorthorns. He has some very good cattle. He has one cow the progeny of which has brought him £26,000. He has some very good Shropshire Down sheep, and says he likes this breed of sheep the best of any he has tried. I noticed some good turnips, and he says he can grow three tons of hay to the acre. I came back to Sherbrooke, still in the Eastern Townships. It is a prettily situated town, with some good residences. I was shown round by Lieutenant-Colonel Ibbotson. Good farms can be bought in the Eastern Townships at from £4 to £6 per acre.

I next went to Halifax, Nova Scotia. I visited the districts of Windsor, the Annapolis Valley, and the districts around Truro and Colchester. All these are large valleys, up the bottom of which the tide rises a long way. There has been a great deal of land reclaimed from the sea, which is known as dyke land. It lies below high-water mark. The tide has been banked out. The soil is composed of a very fine reddish silt of indefinite thickness, which has been deposited by the tide. It is perhaps equal to any land in America for production. The tides come up the river with great force, and bring up a great deal of mud. Many farmers cart the mud into their higher land for manure. Adjoining the dykes is generally a belt of good dry land known as intervale. It is of a sandy red soil, very similar to the red land in the Eden Valley of Westmoreland. Above this, on the mountains, is red sandy land, not so good, and generally covered with wood. Colonel Blair, Mr. Longworth, and others, at the instigation of Dr. Clay, called a meeting of farmers at Truro, for the purpose of giving me the opportunity of asking questions and hearing their opinions about farming in the district, and the prospects of immigrants. There were a great many conflicting statements made, from which I drew the general conclusion

that the selling price of dyke land is from £10 to £60 per acre, and in a few instances it had sold as high as £80. The intervale land could be bought for from £2 to £16 or £20 per acre, according to quality, and uncleared wood land from 2s. to £1 per acre.

It was generally agreed that dyke land will grow from two to four tons of hay per acre, and has done it in some cases for generations without manure. 600 to 1000 bushels of turnips, and from 200 to 430 bushels of potatoes can be grown to the acre, and fair crops of cereals. Apples grow to great perfection in some parts of the province—as to this I can add my own testimony, having seen the trees almost laden down and the ground strewn with their fruit. They were selling at from 4s. to 8s. per barrel of 2½ bushels. It was generally agreed that a man should have considerable capital to start farming in Nova Scotia, as it does not pay to borrow money at 6 or 8 per cent. It is considered that cattle-farming pays best, especially since the English market has become available for their beef. In this respect they have a great advantage over Ontario and the Western States, the inland carriage being lighter. Beef sells in Nova Scotia at 4d. to 5d. per lb. in the carcase. I spent a few days with Mr. Simpson, the manager of the Drummond Colliery, at Westville, Nova Scotia. I went through the colliery; the seam is 16 feet thick of the very best coal, and it looks more like a quarry than a coal-mine. There are other two seams below, one 10 feet and the other 6 feet thick. I was told that the Albion mine close by is 32 feet thick. Mr. Simpson drove me round by Pictou Harbour in sight of Green Hill, where there is some very good land. Of the Eastern provinces I think Ontario and Nova Scotia are the best farmed. I was favourably impressed with the Eastern Townships, where I believe good land is the cheapest. Nova Scotia certainly has a great advantage in being nearest the English market. I noticed especially that the farm-houses of Canada generally are decidedly better than the farm-houses in England. I have met scores of farmers in Ontario and the lower provinces who went out originally from England or Scotland with scarcely anything, who have cleared and cultivated perhaps 200 or 300 acres of land, and are now living in houses equal to any in Hawes. Society is a little different in Canada to what it is here. There is not nearly so much *caste* as in England. The Canadian people are very sociable. A man takes a position there according to his personal merits and conduct rather than to his wealth, though I should be far from saying that wealth has no influence. The Canadians are very loyal to the English Crown, in fact, far more so than the English themselves, and I never met a man who advocated secession from the Empire. A story was told me at Belleville of an American who came into an hotel there, the Dafoe House, and proposed a toast not very complimentary to her Majesty the Queen. He was allowed to drink his toast in silence, but he shortly afterwards left the house minus many fragments of clothing, and has not been seen around there since.

Though I have in many cases given my own opinion, I wish you to rely upon the facts and information I have given, and your own judgment, rather than be guided by mine, as people don't all think alike; but if I had to give any advice as to the class of people best suited to emigrate, I should say the farmer's son who has been brought up with a good knowledge of farming, is not unacquainted with work, and can get together a little capital, might improve his position by going to Canada, and stand a good chance of becoming wealthy. His occupation at home too frequently is spending the first half of his life in making repeated applications for farms, and not getting one till his best days are spent, and when he has got one perhaps he only makes a bare living the rest of his life. In Canada he can certainly get one any day. The labourer may do well, but he will have to go out to the North-West, where he can get free-grant lands and where wages are much higher than in the older provinces. A man with capital can do well either in the North-West or in the older provinces. Middle-aged men, of this class especially, will probably like the older and more settled provinces best, and I should not advise men with money, unless they wish to make more very fast or are fond of a rough life, to go to the North-West. However, to make anything out in the older provinces certainly requires a good deal of capital, and a man who has not got this will make more money and live easier in the North-West. Gentlemen's sons who may have had a good education but have no acquaintance with business or work, and are without money, are not of much use in Canada; nor are kid-gloved farmers, unless they have a superabundance of wits, which is not always the case.

The best guarantee of success is the fact that so many have already succeeded. I could instance scores who started with scarcely anything, who faced the forest and had to almost hew a farm out of wood, as it were, but who are now well off. How much better chance then has a man going out into the prairies now, where he may drive a plough for miles without obstruction, and where the land is better than ever it was in the forest? There is yet another consideration in his favour—nearly all the good wild land of the United States is taken up, so that the great emigration that is going from Europe, and the natural increase of the fifty millions of people of America, will be driven into the fertile fields of the North-West of Canada. The result will probably be such a rush and an enterprise as was never before known on the continent of America; and it is quite possible that young men who buy land now at a few dollars an acre, may live to see it worth £10 or £20 per acre.

I strongly deprecate the statements that have been made by many, that the land in Canada will bear cropping for ever without manure; that in fact in Manitoba it is altogether unnecessary, and would be foolish to apply manure to the land. Now, nothing can be more absurd than

this. It is apparent everywhere in the older provinces of Canada and the United States that the land is being ruined by this system. There is a great deal of land that at first grew from 30 to 40 bushels of wheat per acre, but will not now grow a crop sufficient to pay expenses, and artificial manures have now to be resorted to. I believe the wheat crops in the Eastern States of America do not average 15 bushels per acre.

I sailed from Quebec on the 6th November, and arrived at Liverpool on the 16th, having been away nearly four months.

I was not sick either way, and I can assure you that crossing the Atlantic is not half so fearful as many suppose ; indeed, it is really a pleasure. I looked through the steerage quarters of the ship, the *Sarmatian*, of the Allan Line, and I thought the accommodation, the food, and the treatment of the passengers very good for the money.

MR. BRODERICK ON CANADA.

'I am told that it was a most interesting gathering which the other night assembled at Hawes, crowding the largest room in the village, to hear the report of Mr. Broderick. This gentleman, some months ago, was appointed the delegate of the Wensleydale farmers, to go and inspect Canada with a view of ascertaining its fitness for emigration. So many falsehoods have been concocted and promulgated in regard to various parts of the Dominion, that the independent testimony of an able man like Mr. Broderick should be extremely acceptable and valuable. Indeed, irrespective of opinion, the facts and figures embodied in the report (which this paper publi hes) should be carefully perused by all interested in agriculture. The question is returning to public notice with great force. We are likely to have many comments upon it in the future, and any opportunity of increasing our store of information upon the subject should not be neglected, especially when the weakness as well as the strength of the country is so ably demonstrated. The figures in regard to the value of stock, the price of meat, wages, etc., will surprise many of our humdrum tillers of the soil.'—*Darlington and Stockton Times*, January 1, 1881.

THE REPORT OF MR. JOHN SAGAR,

Of Waddington, near Clitheroe, Lancashire.

'THE report of Mr. Sagar, of Waddington, the gentleman who in May last went to Canada as the representative of the Clitheroe farmers, was submitted to a meeting of farmers and others, held in the Swan and Royal Hotel, on Monday. The meeting, at which there were about fifty persons present, was presided over by Mr. W. Tomlinson, farmer, of Grapes Lane, who, after the reading of the report, invited questions bearing upon the subject of which it treated. Questions were put by Mr. Dickinson of Bradford, Mr. Johnson, the Rev. W. L. Roberts, and others, all of which were satisfactorily answered. Mr. Thomas Grahame, Agent of the Canadian Government, was present, and made a short speech, and the meeting concluded with a vote of thanks to Mr. Sagar for having so well filled his position as delegate of the Clitheroe farmers.'—*Preston Guardian*, December 18th, 1880.

The following is the text of the report:

At a meeting of the farmers of this district held in Clitheroe, in May last, at the instance of the Government of Canada, I had the honour of being selected as your delegate to proceed to that country to inspect its resources and to report as to its suitability for the settlement of British farmers. Before commencing my report, it may be well to mention the circumstances which I understand led to myself and fellow-delegates being appointed. For many years a large emigration has been taking place from England, Scotland, and Ireland, the greater proportion of which has gone to the United States. To account for this, several causes have been assigned.

In the first place, many people have gone out to join their friends; and I have heard it stated that of the exodus of this year to the United States the ocean passages of a very large number were prepaid in America. Then, again, people have got hold of the idea that the Canadian climate is one long winter. Representations of its scenery are almost always wintry in aspect; and, again, until Manitoba and the North-West Territories were opened up recently, Canada had no prairie land which could compete with the Western States of America. But now all this is changed, and it is now certain that Canada possesses prairies greater in extent than those in the States, and equally fertile. This is admitted by the Americans themselves, although many of them who are interested in the sales of land describe Canada—in which they recognise a powerful competitor—as a country to be avoided.

It was, therefore, with a view to place the country in its proper light before those who had thoughts of emigrating that the Government of Canada invited farmers to visit the Dominion and report their independent opinions as to its agricultural position and capabilities.

As to Manitoba and the North-West Territory I cannot speak personally, as I did not go there—Mr. Curtis, of the Skipton district, and myself having confined our inspection to the Province of Ontario. Several delegates were selected, in different parts; but as the country is so large, our party had to be divided, in order to admit of its being thoroughly investigated; and when I say that the Province of Ontario contains an area of about 200,000 square miles, it will be seen that we had a good deal of ground to get over. I understand that the reports on Manitoba, the North-West Territories, and the Maritime Provinces will be printed and published with my own, so that anyone interested can obtain copies at the Canadian Government Offices in this country.

I now proceed to give you my ideas about Ontario. I may here say that I was allowed to go where I liked, and that every facility was given to me in the prosecution of my inquiries. I left Liverpool on July 22nd, in the steamer *Sarmatian*, belonging to the Allan Royal Mail Line; and after a good passage arrived at Quebec on the 31st, three days of the voyage being in the comparatively smooth waters of the River St. Lawrence. The accommodation on board this steamer was excellent, and so was the living, and the trip was in every way an enjoyable one. I had a talk with some of the many steerage passengers on board. They seemed to be well satisfied with their quarters and their food.

The land on the shores of the St. Lawrence, 200 miles below Quebec, did not seem to me

to possess any attractive features for the eye of the agriculturist, but about 30 miles from Quebec it assumed a better appearance, and I should say there is some fair land there, although I could only judge by the view obtained from the deck of the steamer. We stayed in Quebec over the Sunday, and then went on to Montreal, the largest city in the Dominion, with a population of about 150,000. It is picturesquely situated on an island on the St. Lawrence, and at the back of it rises Mount Royal, from which a beautiful view of the city and the river is obtained. I do not know a place of its size which contains so many fine business buildings and handsome residences. The quays and wharves are considerably over a mile long, and great ocean-going steamers of 4000 tons burden can be moored alongside. I am told that during 1879, 289 steamers arrived at the port, and 323 sailing vessels, and that during the present year the numbers have largely increased. Indeed, the people are hoping that when the present system of canals is enlarged (the work is now in operation) a large proportion of the grain and other produce will find its way from the Western States of America and of Canada through this port, for not only is the distance from Chicago to Montreal less by 150 miles than from Chicago to New York, but there are 16 more locks and 89½ feet more lockage by the latter route than the former; and the distance from Montreal to Liverpool is 300 miles less than from New York, which should mean cheaper transit.

We went to Ottawa, the capital of the Dominion, and saw Mr. Lowe, the secretary of the Department of Agriculture. After some conversation, it was decided that Mr. Curtis and I should report upon Ontario, as before stated; Mr. Broderick of Wensleydale, and Mr. Imrie of Glasgow, doing Manitoba and the North-West.

From Ottawa we proceeded westward, and visited a large number of townships, towns, and villages in the different counties. I do not think it will serve any good purpose to describe in detail each farm and each district I visited. I may say that we made Toronto, Hamilton, and London our headquarters, and journeyed into the country from these centres. I propose to give a short description of each, and to finish with a few general remarks, more or less applicable to the whole province.

Toronto is the principal city in the west of Old Canada, and has a population of about 80,000. It is a busy, thriving place, possesses many fine buildings, schools, colleges, and a public park, and the inhabitants being principally English by birth or by descent, it is more British in its characteristics than any of the cities in Eastern Canada, where the population is largely composed of French Canadians, most of whom speak the French language and own adherence to the Catholic religion. During our stay in Toronto we made a tour of the country, 40 miles north and east thereof, and were conducted by Mr. William Rennie, a seedsman of that city, to whose kindness and assistance I was much indebted. We inspected the farms, roads, soils, crops, and system of agriculture, and had conversations with the leading farmers in the district. Our first visit was to Messrs. Leslie and Sons' Nursery at Leslieville. Unfortunately the proprietors were from home, but under Mr. Rennie's pilotage we examined the orchard and shrubbery near the house. There was a magnificent collection of dahlias; the pear-trees were loaded down with fruit, the weight of which was actually breaking the branches; a magnificent spruce hedge to the west of the house interested me very much. The next point of interest was Mr. Simon Beattie's farm on the Kennedy Road, where a fine crop of mangels and two or three varieties of turnips and other root crops indicated the breeder and feeder of cattle. Mr. Beattie is known all over Canada and the United States as an importer of high-class cattle. He imported some of the finest cattle and sheep at the Royal Agricultural Show at Carlisle this year for breeding purposes. Mr. Johnson's farm on the same road also called forth favourable comment, a nice young orchard, with a spruce hedge along the west side as a wind-break, being especially noticeable. The next farm was that of Mr. Glendinning, the champion quoiter and bowler. One of our party remarked that superiority at these games did not make a perfect farm. Some roots, with more than the average quantity of weeds, would have been improved by scuffling at the proper season; however, on the whole, this farm had not a bad appearance, and its defects would not have been so noticeable but for its proximity to one of the model farms of Scarboro', that of Mr. Andrew Young. The beautiful clear fields, cattle in good condition, good orchard sheltered with a handsome pine wind-break, all denoted the careful and enterprising farmer. Mr. Young makes specialities of Ayrshire cattle and Clydesdale horses. At a distance could be seen the fields and buildings of Mr. Andrew Hood, the prize ploughman, who, with Mr. S. Rennie (also noted for his work with the plough), hopes to come into contact with the ploughmen of Great Britain at the Scottish match next year.

A stumpy patch on Mr. Kennedy's farm, which we next visited, caused by a wind-storm, which levelled a portion of his woods a few years since, brought up the subject of oxen. Mr. Anderson, a delegate from Ireland, stated that he noticed oxen were very much used in the North-West, which he had just returned from exploring. One day he met a farmer with a very ugly team of oxen, obstinate and hard to manage, and said to him:

'Friend, you are having a hard time with your oxen?'

The driver said with a sigh, 'Yes, I came out here a religious man, but I am now persuaded that no man can remain religious and drive oxen.'

Mr. Rennie, who had much experience with oxen, and was at one time noted for his success at

logging 'bees' and other places where oxen were used, said that it was a mistake to suppose that oxen required to be yelled at or pummelled, as is so often the fashion. By uniform kindness and gentleness a driver can manage oxen with as great ease as he could horses.

Arriving at the Rennie homestead about noon, we were invited in to dinner. This farm is worked by Mr. S. Rennie, and is a credit to the township. To the west of the house, in what used to be his mother's duck-yard, is the spot in which are now raised most of the roots which he exhibits at the various shows. The red and white carrots, mangels, sugar beet, etc., growing here were very fine. Two pumpkins (weighing over 35 lb. each, and not at full growth), mammoth squash (weighing at least 150 lbs. a piece, and likely to be 275 lb, before they stop growing, so it was said), and swede turnips of immense size, were indications of what can be done in fancy farming. A field of white carrots, mangels, and potatoes, grown with ordinary cultivation, gave evidence of being a very heavy crop, in fact I never saw a better field in all my life.

Mr. Rennie shows some very fine Suffolk pigs from a prize boar and well-bred sow. He considers the Suffolk the best breed for grass feeding and running out. The grain crop is stowed away in his barn in excellent order. In reply to questions, he said that in 17 years' farming his smallest crop of barley averaged 38 bushels to the acre, whereas he had one year an average of 55 bushels. A splendid young orchard, planted to the north of the house, is sheltered on the north, east, and west by a hedge of Norway spruce, which will not only protect the trees from the frost but also from the fall winds, which do so much damage to fruit by shaking it off and breaking the trees.

After leaving this farm Mr. Thomas Hood's was next viewed. A hedge of wild apple-trees was a novel feature. We next passed the farms of Mr. John Gibson, a good farmer and a strong advocate of proper rotation of crops; of Mr. William Hood, jun., whose farm is a model which it would be well if the farmers of Markham would copy; of Mr. William Rennie, who has within a couple of years planted out silver maples the whole way round his 120 acres, which are in an excellent state of cultivation.

We made some stay at Mr. Robert Marsh's farm, where we viewed his flock of South Down sheep, of which he is justly proud. His sheep are all from imported rams and principally from imported ewes, and show in their faces, fleeces, and form that they are pure bred. Mr. Marsh has been trying lucerne, and speaks favourably of it. He thinks that in rich land it might be cut three times a year, and that it would yield 2 to 3 tons per acre at each cutting. He took nine medals and nine diplomas at the Centennial Exhibition, and in all 80 prizes last year.

From here we proceeded to the extensive premises of Mr. William Russell. Mr. James Russell shows with pride a gold medal won by his shorthorn 'Isabella,' as the best animal, male or female, shown at the Centennial. He also shows five silver medals, one bronze, and one Canadian Commissioners' medal, all won at that exhibition, and all for shorthorns. He has now a flock of 120 Cotswold sheep, with winners from the English Royal Exhibition at its head; also 35 shorthorns, with 'British Statesman,' an imported bull, at the head of the herd. Also some very fine Berkshire pigs from a first-prize sow at the Royal. Mr. Russell has 300 acres here and 150 a couple of miles to the west, and he and his boys keep it in excellent condition. Some of the Cotswolds were weighed, with the following result: 4-year-old ewe, 345 lb.; 3-year-old ewe, 323 lb.; 2-year-old ewe, 323 lb.; 1-year-old ewe, 310 lb.

We had a discussion as to the respective merits of the various breeds of sheep, and it was stated that for the best mutton the South Down was to be preferred, but for the best wool and mutton combined the Cotswold bore the palm. The shorthorns were turned out into the yard and examined, and they were really a creditable lot of animals. Some of the calves were very fine.

While on the subject of the Toronto district I do not think it will be out of place for me to quote in full a cutting I have taken from the agricultural columns of the *Toronto Weekly Mail* for October 29th, 1880, a leading newspaper of the Dominion, which gives an idea of what can be done in the way of growing roots in the province. I shall have to make some remarks on this subject later on:

'There is no feature of Canadian farming which astonishes agriculturists from the old country so much as our crops of roots. Brought up with the idea that the height of good farming consists in the raising of fine root-crops for feeding cattle, and being assured that there are no farmers like their own, they are surprised when they arrive in Ontario to see mangel wurzels, sugar beets, swede turnips and carrots, heavier crops and finer specimens than they have ever seen before. Mr. William Rennie, seedsman, of this city, recognising the value of this fact, and knowing that our regular fall shows come too early for the exhibition of mature roots, instituted some years since a root-show, which has annually brought forward an excellent exhibition of roots as well as other farm products. This year the exhibition was held yesterday, and the whole exhibit is now to be shipped to Mr. John Dyke, Government agent at Liverpool, to be placed on exhibition.

'Mr. E. Stock, of Etobicoke, showed some excellent roots, among which may be mentioned long red mangels, one of which weighed 73 lb., the heaviest weight on record; red globe mangels; yellow globe mangels, the heaviest of which is 58 lb.; six swede turnips, two of which are exceedingly large; also graystone and whitestone turnips, white and red carrots,

red, white, and yellow onions, and parsnips. He also showed some long red mangels, which were sown 25th June, and pulled 25th October, one of which weighs 18½ lb.

'Mr. S. Rennie, of Markham, also showed some remarkably fine specimens of his skill in farming. Long yellow mangels, long red mangels, red and yellow globe mangels, the yellow weighing 55 lb.; white carrots, a beautiful sample; parsnips; a citron, weighing 33 lb.; a field pumpkin, weighing 37 lb.; and, to cap all, a mammoth squash, weighing 303 lb.

'Mr. H. J. Clark, of Muskoka, exhibited a vegetable marrow weighing 14 lb.; Mr. John Finlis, of Leslieville, some very fine yellow and red onions; and Mr. John Wright, of Parkdale, among other articles, some graystone turnips, weighing 10 lb. apiece. Messrs. George Leslie and Sons, of Toronto Nurseries, exhibit specimens of shipping apples.'

During our stay at Hamilton we had several pleasant drives into the country. One of the first places we visited was the vineyard of Mr. Thomas Barnes—the name of his place is Carrock Lodge—and were shown over the vineyard and farm by the proprietor. Various kinds of grapes were shown, and the methods of cultivation explained to us. The vines were heavily laden with fruit, and I must say I had no idea that Canada was capable of growing the grape to such perfection, considering that the latitude was about 46 degrees north. This does not point to the climate being such a terrible affair when we consider that these grapes grow and ripen in the open air and are left unprotected during the winter. The same remark also applies to the fruit-trees, apples and pears, to peaches, melons, tomatoes, and such like. In travelling along the road I was much struck with the neat and substantial farmhouses, far better than the average in this country, and the furniture I noticed in those I visited is of a more costly and better description.

Our party next visited Mr. Jardine, at Vine Vale Farm, where a fine herd of Ayrshire cattle were let out for inspection, and, taking animal for animal, I think England and Scotland would find very few to equal it. Two or three of the animals were especially fine. The whole herd of about forty are, with one exception, native-bred, and have taken a number of medals at different fairs. After viewing the cattle we were shown over Mr. Jardine's hop-house, and saw some of the hops which were just being cured. There is great competition among hop-gatherers here, as in England, as to who can place the first in market. Mr. Jardine was ahead this year, having placed his in the market on the 26th of July. The last of this season's produce he harvested during the first week in August.

Our next journey was through a portion of Halton county, bordering on Lake Ontario, in the neighbourhood of Burlington. We had the pleasure of being accompanied by Mr. H. Hurd and his brother. A short stop was made at Oaklands Farm, where we saw a fine crop of corn; the stalks were so tall that we had to look up at them. The next farm visited was Mr. Hurd's, at Burlington, the attractive feature being an extensive cultivation of fruit. The farm consists of 75 acres, on which are 600 bearing apple-trees and 1500 pear-trees just coming into bearing; and, besides, there were 25 acres of nursery stock and an excellent crop of oats and barley. The farm is all under-drained, and everything was in prime condition.

We next went to view Mr. O. T. Springer's farm, close by, where there was an orchard of 2000 apple-trees in full fruit.

The drive was continued to the farm of Mr. John Fothergill, known as the old Baxter Farm, and one of the finest in this part of Ontario. It consists of 200 acres, only 30 of which are in bush, nearly all the remainder being under cultivation. On arriving at the farm, we were met by Mr. Fothergill in person, who gave us a cordial reception. We first inspected the stock, of which Mr. Fothergill has a fine collection. Some 25 head of cattle were shown, all thorough-breds, mostly of the shorthorn Durham breed, and generally imported animals. We were then escorted over the farm to view the grain and root crops, which were generally commendable. There were fine fields of oats and barley, promising heavy yields to the acre, while the root-crops were also very good. One field of turnips, thirteen acres in extent, deserved special attention. The ground had been thoroughly manured in the ordinary way, and, in addition, 400 lb. of Kingston phosphate per acre had been applied. The good effect of this fertiliser was seen in the result of an experiment which Mr. Fothergill had made to test its value. Two rows which had been left without the phosphate were easily picked out, and there were unmistakable indications that from them there would only be one-third of a crop as compared with the rest of the field. Mr. Fothergill has another farm of 250 acres, which he works, some little distance away.

Our next visit was to inspect the world-famed Bow Park Breeding Establishment, where we were met by Mr. Hope, the manager of the farm and herd. We had ample opportunity afforded us by the courteous manager to inspect the farm—comprising 1000 acres—which is under the highest state of cultivation, and worked principally with the view of soil-feeding and the production of roots for winter. The crop of cereals and roots upon the estate was excellent. The cattle then came under inspection, which for number, the variety of its families, and the purity and excellency of its blood, is said to excel not only anything in America, but is unapproached by any other herd in the world, and is one of the monuments left to the Dominion by the late and lamented Hon. George Brown, the founder of this celebrated family of shorthorns. We were

much indebted to Mr. Hope for his kind attention and hospitality. Mr. Clay, the resident shareholder of the association, was absent in British Columbia as assistant to the British Royal Agricultural Commission.

We also went to Guelph to see the Ontario Agricultural College and Model Farm at that place, which is supported by the Government. It is about 550 acres in extent, and is presided over by Professors Brown and Mills. Its objects are to give a thoroughly practical agricultural education to persons who intend to adopt farming, and to conduct experiments which may tend to the advancement of agriculture. Its benefits are largely availed of, so much so that an extension of the premises is being made. I may add that each student is paid for his labour on the farm, and it is said to be possible to cover one's expenses of board and lodging in this way; the tuition is free.

We next made a tour through the district around London, the principal town in the county of Middlesex, Western Ontario. It has a population of 25,000, and is likely to become a large city. What strikes one here is the repetition of the names of our own Metropolis. It has its Hyde Park and Kensington; the river running through it is called the Thames, and the bridges also bear familiar names. Our first drive was through the Westminster district, and several farms were visited—the land was of an excellent description and undulating—suitable for arable or pasturage purposes.

We then went to the Robson settlement and saw good herds of fat cattle; on one farm of 200 acres there were 80 head, and on another 50, in very good condition. Through the western part of the township of Westminster, and to Port Stanley, on Lake Erie, and from there to St. Thomas, was the next journey mapped out for us. We saw many fine farms throughout this district, and the houses were of a substantial description; in fact, some of them might almost be called mansions.

While in the London district I paid a visit to Petrolia, in the township of Enniskillen, the great mineral oil district of Canada. The oil is pumped out of the earth and is refined, and is already a great industry in these parts. We were driven through the township by the mayor, Mr. Kerr, and saw some very good land. It would be improved by better drainage, it is true; but in connection with this fact it should be observed that land can be bought for 10 dollars per acre. A good deal of it is uncleared; but this is not considered a disadvantage, as I was told that the timber often realises more than the price of the land. I consider it a good place for grazing farms.

We continued our journey to Sarnia, at the foot of Lake Huron. This is a great fruit-growing district; apples, pears, plums, and peaches, flourish luxuriantly, and are very cheap. During our stay here we had an opportunity of examining the system of registering titles to land in Canada. It is very simple and complete, and I may add that the cost of making a transfer is very small, and need not exceed 30s., including lawyer's fee.

Our next trip led us into the counties of Kent and Essex. There are a good many French settlements in this district, where the land was fairly good, though the farming did not come up to a high standard. There is some better land at Colchester, about eight miles from Kingsville, which is well farmed. Fine orchards and good farm-buildings meet the eye, and I also noticed some good herds. At Morpeth we inspected a fine farm owned by Mr. Gardiner, consisting of 245 acres all in excellent order. The land a short time ago was considered a poor one, and the three former owners could not live on it, but by proper farming it has been brought into good condition. He uses salt largely as a fertiliser. He has some good cattle, some of them imported animals.

We also went to the farm of Colonel Desmond, 245 acres, which is in still better order, having always been well farmed. It has been in the colonel's possession over sixty years. He is a hale old gentleman, and works on the farm himself.

We then made our way to Chatham, in the county of Kent, which is the centre of a fine farming district. This town is situated on the River Thames. We visited the farm of Mr. Dodson, which is in excellent condition and well drained. There are 26 acres of orchard attached to the farm, and fruit was so plentiful as to be rotting on the ground. I think the land in this district among the best I saw in Canada.

The county of Kent is second to none in the province for its fertility or the variety of its products. It stands perhaps first as a fruit-growing district, apples, pears, peaches, plums, cherries, quinces, and grapes being produced in vast quantities. Grape culture is made a speciality by some persons. While all the cereals grow well, Kent is one of the few counties where a considerable area is devoted to the growth of Indian corn.

On the Lake Erie front the soil is a gravelly loam, further back clay loam is met with, and in the northerly and easterly parts of the county a sandy loam prevails. There is a good deal of very fine stock in the county, much attention having been paid to the breeding of improved animals during late years; this applies to horses, cattle, sheep, and hogs. Prices of farms vary from 10 dollars (£2) to 100 dollars (£20) per acre, depending mainly on locality and the extent of improvements effected. The lake supplies ample water navigation, and this is supplemented by the Great Western and the Canada Southern Railways, which cross the county from north-east to south-west, and a line is now being constructed from Rond Eau to Chatham, thence

northward to Dresden, and finally to Sarnia, not only intersecting in its course the two main lines already referred to, but also connecting at Sarnia with the Grand Trunk system.

On our way back from Chatham to London we passed through a very fine farming district, the land in the last forty miles, nearing London, being especially good. I may state that the soil varies from a heavy clay to a sandy loam, and can be bought at from £7 to £20 per acre, including buildings. The average production of cereals and roots is said to be as follows: Wheat, 20 bushels; barley, 30; peas, 12; oats, 35; potatoes, 100; turnips, 300; hay, 1½ ton per acre. The rent of farms varies from £20 to £80 per 100 acres.

We next inspected the district between London and Wingham, Huron county. The view of the land one generally gets from a railway car is not very good, as the lines seem to pass through the worst land, but in our present journey this will not apply, as the country we passed through seemed to be a fertile district. We were driven around Wingham by the mayor, Mr. B. Wilson, and Dr. Tamlin, an old resident in this part of the country. The land on our way to Teeswater has only recently been cleared, as we were told, but it appeared very good land. We visited the Teeswater Butter Factory. The butter, it was said, commands a very high price in the British markets. We were shown a large number of packages, ready for shipment, for which 1s. 2d. per lb. had been refused. The butter is not touched by the hands during its manufacture. We also visited a cheese factory at this place controlled by Mr. Wilson. The cheese was of a very good and uniform quality, and ought to bring a good price.

During my stay at Toronto a large agricultural exhibition was held, which I visited. The exhibits of cattle were very creditable indeed, some of the animals being equal to anything I have seen in this country. A white ox and a roan one particularly attracted my attention. The show of sheep also was excellent, and notwithstanding the winter, which necessitates housing, they seem to do very well. No disease is found amongst them: no scab, foot-rot, or maggot; and this remark applies also to the cattle, which are allowed to enter England alive, while those from the United States have to be slaughtered at the port of debarkation—certainly a great advantage to the Canadian dealers. The pigs also were of good quality. The show of cereals, fruits, and roots I have rarely seen equalled. Implements also formed an attractive feature at this show. They are lighter than those of English make, and easier to work. I went to see a trial of a binder and reaper, worked separately, and although it did not seem to act as well as was expected, it was considered to be satisfactory, and will doubtless be heard of again. The maker was John Watson, of Ayr. The mowing machines seemed to me to be better than those we have; they are used both for hay and clover. As stated previously, I did not have an opportunity of visiting Manitoba, but I must not omit to mention the 'Manitoba Exhibit' at this show. It gave a good idea of what that district can produce, and I shall be mistaken if my fellow-delegates have not something surprising to say about it. I had always understood that its climate was something to be avoided, but there cannot be much the matter if the country can produce such wheat, barley, oats, and roots as I saw in Toronto.

I also visited an agricultural show at Hamilton, which was very much like that at Toronto, the exhibits of fruit and implements being larger, if anything.

As regards the price of land, improved farms can be bought throughout the province at prices ranging from 40 to 100 dollars per acre, according to the quality of the soil and the state of the buildings. Free-grant lands are also obtainable; and as to these, full information can be obtained from the Canadian Government offices in this country.

To start farming on cleared and improved land, I think a man ought to have from £700 to £2000—the more the better. In some of the best districts farms of 100 acres are purchasable for from £1000 to £1200, such as would cost treble the price, or more, in England; but I should recommend anyone to rent a farm in the first place, until he has time to look about him. No one should be in a hurry to buy. Of course, on a free grant of land a very much smaller sum than that I have named would suffice. I may mention here, as an instance of what can be done, the case of Mr. Coward, of Maple Grove, Brantford. He has an excellent farm, and as good a stock of cattle as I saw in Ontario; he has twelve acres of orchard, from which he realised 160 dollars in 1879; and grows good wheat and fine thin-skinned barley. He is now well off, but started on a very small scale. Mr. Stock, of Hamilton, too, started without means. He now owns a fine farm, which his sons work; he himself has retired. These are only a sample of many cases I came across; but of course this success is not obtained without hard work.

I made inquiry as to why so many farms were for sale, and found that many reasons were assigned. Many of the farmers are the pioneers in their districts, and some, having a liking for that sort of life, wish to sell their farms and go with their grown-up families to new districts (many make their way to Manitoba), where they can get a larger tract of land at a lower cost, and employ their capital in developing new properties. Others have got up in years, and wish to retire. Others, again, have their lands heavily mortgaged, and owing to the high rates of interest charged for money, have to sell out; while others have impoverished the soil, and do not care for the trouble of recuperating it.

While on this subject, I may say a few words about the system of farming. In the past, the idea seems to have been to get as much out of the soil as possible, and to put nothing back. Successive croppings of wheat have been resorted to, and have naturally had the effect of

weakening the land. Manuring has been a matter very little thought about; in fact, the straw and stable manure has evidently been deemed an incumbrance rather than a benefit. I am glad to say, however, that there is a likelihood of a better state of things prevailing. Ontario farmers are beginning to see the importance of cattle-raising, and as a consequence, more roots and green fodders are being grown, and the straw utilised. This cannot fail to be productive of good results.

The educational system of the province is very complete, and the tuition is free. Taxes are light, ranging from about £5 10s. to £6 per 100 acres, including school-rates. The church is self-supporting, and consequently there are no tithes.

The roads are good, generally about 66 feet wide, and the markets are easily reached The province is very much like a district of England, villages and towns scattered about; but still it cannot be said to be thickly populated, the inhabitants only numbering about 1,800,000.

There is a good opening for agricultural labourers, who can get 4s. to 5s. a day, or £30 to £35 per year, and board. A careful, hard-working man has a good prospect before him. Domestic servants are in great demand, the wages ranging from £10 to £15 per annum.

The average crop of wheat, so far as I could learn, was from 20 to 34 bushels per acre; oats, 36 to 40; barley about the same; Indian corn 40 bushels. Potatoes were excellent. I pulled up some roots on which there were from 10 to 13 tubers. The price of wheat ranged from 90 to 95 cents per bushel; butter, 25 cents per lb.; eggs, 25 cents per dozen; beef and mutton, 2½d. to 5d. per lb. Living is certainly cheaper than in England, and clothes, of Canadian stuffs, are about the same price; of course, if one requires English goods, a higher price has to be paid.

I had almost forgotten to mention my visit to the Muskoka district, which is now being opened up. It contains much soil that is good, bad, and indifferent, many parts being rocky. It is, however, considered to have a good future before it, both as a wheat-growing country and for cattle-raising, and some of the produce shown to me certainly seemed to bear this out.

Now, as regards the climate, it is certainly hotter than in England during the summer, or the fruits could not be brought to the perfection that is apparent, but the heat is not felt to so great an extent as it would be in England. Owing to the great lakes and to the dryness of the air, the thermometer at 90° in the shade is not so uncomfortable as one would expect. The winter is longer than we are accustomed to, and more severe; but the Canadians look forward to it with no unpleasant feelings. They say that the air is so dry, clear, and bracing that the season is most exhilarating and enjoyable. The worst feature about it is that cattle and sheep have to be carefully housed; but when roots are grown, and the fattening of stock more practised, this need not be any great disadvantage. As to this, I may say that I hear that a Toronto syndicate have contracted with the Allan Steamship Line to convey 21,000 head of cattle to the English markets during the next three years.

I came across an interesting letter, dated October, 1879, in one of the books recently published by the Government of Ontario. It is by one of the Professors (Mr. Brown) of the Agricultural College at Guelph; and being, therefore, reliable, I quote portions of it, as it may be of interest to my readers.

From a British Farmer in Ontario to British Farmers.

'. . . My claim to be an authority on this subject is a twenty-years' daily professional intercourse among yourselves, and an eight years' one as practical and as intimate with Canadian farmers. Now, just as I make a speciality of addressing a particular class of agriculturists, so I shall confine my remarks to a particular part of this Dominion (Ontario). . . . . Two-thirds of this garden is under cultivation; the remainder consists of woodland, swamp, pasture, and water. Comparatively few tree-stumps remain to mark the progress of clearing during the last half century, for this short period practically limits the history of the plough in Ontario; neither can we count many log-huts, though primitive rail fences are plentiful. Dwelling-houses of stone and brick, equal and superior to many of your own, are very common. Men from England, Scotland, Ireland, and Germany have done all this. Wealthy landed proprietors here were formerly Yorkshire cattle-men, Highland shepherds, or Paisley weavers, Ulster ditchers, and German labourers. Many of them are still alive, driving their own reaper, or representing their own county in the Parliament at Ottawa, or the Legislature at Toronto.

'We have two long seasons in the year, summer and winter, with a *smell* of your spring and autumn—winter from the middle of November to the middle of April. The health of the province is about the average of civilised countries for all sorts of life. There is no mistake about the weather! 85° in the shade is—85°; and zero is unquestionably 0°.

'The wheat of Ontario is, at present, from about equal surfaces of winter and spring sowing, and with a tendency to an increase in the latter, producing 25 and 15 bushels respectively with poor farming, and seldom under 40 and 25 by good management. Straw and head are not so heavy as with yourselves, because growth is pushed too much; but quality is superior by reason of the same cause. The over-clearance of forest has made wheat-growing more precarious by the

want of immediate shelter, snow not lying on the exposed parts. But replanting and a second natural growth of timber are in progress. We have never had what may be called a general failure in the wheat crops, even with all our carelessness; so you may judge what skill and capital should do.

'I have, in my own experience, proved that what is called exhausted land can be thoroughly recuperated in four years, by liberal treatment and systematic management, at actually no cost on an average of seasons; for the simple reason that much of this poor condition has been brought about by one class of crops, and not a variety in any form. Land sick of wheat is not necessarily exhausted; we have but to deal properly with present unavailable fertility to bring out large productive powers.

'Barley is invariably a sure crop, and is always a valuable one, whether for malting or animal food. From 30 to 40 bushels per acre is common. Oats, in quality of meal, are equal to your own, but lighter per bushel, being thicker-skinned, as the result of rapid growth; 40 to 50 bushels per acre. As a rule, the straw of the cereals is got at the rate of 3000 lb. per acre. Corn (maize) is not generally a common crop for production of grain, though very plentiful and valuable for green fodder, as elsewhere noted. Peas and beans are important farm crops, the grain and straw of the former being first-class food for sheep; the yield is usually 25 bushels per acre.

'In the improved system of breeding and fattening stock, green fodders are now taking an important place. The climate is particularly suitable for successive rushes of vegetation during one season. Under liberal treatment they can be so arranged as to afford a continuous supply from middle of April to 1st of November. Thus:

1. Lucerne, four cuttings	20	Tons per Acre.
2. Winter Rye, two cuttings	4	"
3. Red Clover, two cuttings	6	"
4. Tares and Oats, one cutting	3	"
5. Millet, two cuttings	4	"
6. Maize, one cutting	30	"
7. Rape, one cutting	7	"

8. The thousand-headed Kale and Prickly Comfrey have just been introduced with success.

'In the cultivation of roots, Ontario has already made herself a name in the world, even under the difficulties of more heat and the shortness of her autumn, in comparison with Britain. We are gradually realising the facts that for a thorough cleaning and manuring, along with a crop unequalled for a winter supply of health and feeding to all animals, turnips, mangels, and carrots are now indispensable. For size and quality they are almost equal to your own growing. Potatoes may be included in this character, in which we are superior, both in quantity and quality. Swedes, 18 tons; mangels, 22 tons; carrots, 15 tons; and potatoes, 8 tons per acre on an average.

'We have difficulty in establishing a variety of grasses, either for rotation or permanent pastures; but persistent trials are gradually adding to the number of those able to withstand the winters. Cultivated pastures invariably tax our best distribution of animals to overtake the luxuriance of growth, and though the same stamp of beef as yours is not always to be had from grass, we always find our stock in improved flesh as autumn comes. Hay is a standard of large value, as it is often a cause of mismanagement, by reason of its prolificness—in inducing an over-continuance of the crop in the hands of the lazy and incautious, not realising, as they should do, that grasses proper are about as exhaustive as the other grasses called wheat, oats, and barley. From 3000 to 5000 lb. of hay per acre is common. The clovers, separately and in association with hay, are most luxuriant and valuable, both as a cropper, a restorative of exhausted soils, and an improver of poor ones. We look to root and clover cultivation as the means of making good the past mismanagement in excessive wheat-growing.

'We can grow first-class beef and mutton with the products of our own soil, as fast and for less than you can do. We can take a Durham or Hereford cross-bred steer from its milk, when six months old, put it upon green and dry fodders, according to the season of the year, with bran and pea-meal or corn-meal, and within 24 months place it on our seaboard at an average live weight of 1400 lb., and at a cost not exceeding £14. In this and all its connections there necessarily results a large profit.

'You have heard of the woodlands of this country, and the difficulty in many cases of clearing and getting rid of the stumps and roots. This is true to those new to the axe, and as true that our hard-wooded lands give more choice of site and soil than prairies, and certainly are more reliable for alternate farming and more valuable as an investment. The tree crop itself in Ontario is as costly as the best arable, so that, when you come to purchase, the desire will be for more tree surface than is generally to be had. Be sure of the long and dear-bought experience of our pioneers, that no land on this continent is so safe and so kindly as from the primeval forests. Then again, few Governments are so liberal as ours in the encouragement to agriculture

and arts. Our township, county, and provincial exhibitions are a most important and interesting feature in connection with the progress of agricultural industry.

'We have also to offer you variations in your profession that now command the attention of our most enterprising capitalists. I refer to fruit-growing and dairying. Cheese and butter-making is conducted here on a scale and by methods unknown to the average British farmer—a branch of our rural economy characterised by immediate returns on moderate capital. It appears as most unnecessary to note that the excellence in bulk and variety of our fruits take no second place in the world's competition. The farmer's orchard here means one-sixth of the family keep.

'While a very large country, Ontario is not yet thickly populated. Ontario all over has only from 1,800,000 to 2,000,000 souls, and as we plough some 10,000,000 acres, an estimate of our surplus may be made. That surplus, though not so large as it ought to be, will ere long be an immense one, even on the doubling of population. Our flour is well known in your own markets as of superior quality. The United States grade our No. 2 barley as equal to their No. 1 (cause, soil and climate), and take all we can afford to send them. The herds and flocks of Ontario are now looked up to by all on this continent as fountain-heads of excellence, purity, and healthfulness. We are at the present moment unable to supply the demand for Cotswold sheep and Hereford cattle, and thus all over we are desirous of adding to our wealth and skilful management by the accession to our ranks of those who have the pluck to endure a few years' personal labour with the certainty of success in the end. I purchased 220 acres for 5280 dollars (£4 18s. 6d. per acre); beautifully situated upon the shores of a navigable lake within five miles of a town, which is the centre of a rising district of a midland county of Ontario, that soon became the junction of two railways. Soil, a rich clay loam, naturally dry, except ten acres, and about fifteen very stony; has been very poorly cultivated, is well sheltered (lake, south and east, excepted) by one-third of the area which is under a maple, beech, and birch bush; garden and small orchard indifferent, fences old and poor, houses fair, roads good; a stream runs diagonally through the farm, and there existed no difficulty to a good title and a well-surveyed boundary. Here I considered that judiciously laid-out money in permanent improvements, with better farming, and steady self-application to labour, would bring about a change.

'I shall place in juxtaposition to the Ontario case that of a farm many years in my own hands in a midland county of Scotland, which consisted of 100 acres arable, 40 acres of meadow pasture, and 800 acres of hill-grazing, and which comes in well in most respects as a fair, comparative example. The case of both was for a husband, wife, and five children :—

'*Ontario Proprietorship.*—Taxes, including road-money, school-rates, railway bonus, and county rate, 55 dollars, or £11 6s. 4d.

'*Scotch Tenantship.*—Rent and taxes: Arable, 30s. per acre, £150: meadow, 18s., £36; hill pasture, £40; poor-rates (half), £4 16s.; road-tax (half), £2 18s.; fire insurance on buildings, £2 2s.; cartages for proprietor, £1 3s.; "Kan," 15s.; interest on fence protecting from game, £17 15s.; total, £255 9s.

'*Comparative Abstract.—Ontario Proprietorship:* Sum invested, £2152; taxes, £12; annual maintenance of farm, £352; household expenses, £199; gross annual returns, £635; surplus revenue during five years, £363; realisation after five years, £2550. *Scotch Tenantship:* Sum invested, £2600; rent and taxes, £255; annual maintenance of farm, £724; household expenses, £265; gross annual rentals, £1308; surplus revenue during five years, £305; realisation after five years, £2400.

'It appears, then, that a capital of £2600 invested in British farming takes fully one-third of itself for annual support, of which one-fourth is household; and that there is an annual gross revenue equal to half the invested sum, which sum does not always increase in value, but may be considerably lessened under certain conditions. It also appears that £2152 invested in the purchase of land and the farming of it, in Ontario, requires one-fourth of itself for annual maintenance, of which one-half is household; and that there is a gross annual revenue equal to nearly one-third of the invested sum, which sum increases 22 per cent. in value during years under special conditions. The return per acre is much larger in Britain; living is not so different from your class as may be supposed, and the great difference of annual maintenance is largely in rent and labour.

'I could say much more that would be of interest to old countrymen and colonists, but a letter having to be a letter only, I must defer until a better opportunity for details. I trust very many of you will at once take advantage of the present condition of things, that is (1) your own difficulties, and (2) the fact of land here being 25 per cent. lower in price than four years ago.'

And now just a few words as to Canada, and particularly Ontario, as a field for emigration. This is a question which I approach with some caution. The country is undoubtedly a fine one, and I was very nearly buying some land for myself there. It, of course, has its drawbacks, as every place must have. In the first place, its winters are nearly five months long; but, from all I heard, the principal inconvenience is that the sheep, as well as cattle, have to be housed during that season. Then, the yields are not so great as on our English farms, and wages are higher;

but, to counterbalance this, neither the cost of land nor the rent and taxes are so high as in this country, and cattle and the cost of living are cheaper. These small yields, too, are in many cases accounted for by bad farming, an error a new settler need not fall into; and, as it has reduced the price of land, and as manure is cheap, it is not altogether a great disadvantage from an English settler's point of view. My advice is, to people who are getting on well in England, or who hope for better times and can hang on, 'Stay where you are;' but for men who are seeking new fields in which to employ their capital and farming knowledge, and especially those who have grown-up families, I believe that Canada offers an opening which is second to none. One can reach Canada much cheaper than any other colony, and land is at a lower price, with a better chance of selling the products to advantage. There are many men in Canada who started as pioneers years ago with no capital but an axe, but are now well off. This cannot but be regarded as hopeful.

Anyone with a small capital need not, however, go through the hardships of a back-woodsman's life, now that cleared land is so comparatively cheap and can be rented at such a low price. Agricultural labourers get good wages, and, I consider, have a good prospect. But the Ontario farms could get a better and more satisfactory system of labour if they would establish a class of resident labourers on their land, similar to those we have in England, providing cottages for them, with small garden lots, which could easily be done.

I have been asked, if Canada is so fine a country, why the people who have lands there and get on so well do not write for their friends, in the same way as is done in the States? As regards this, in the first place, it must be remembered that the United States of America has a population more than eleven times as great as Canada, so that it is not astonishing that emigration should be greater than to the latter country. I quote the following figures taken from Parliamentary returns, which show the relative emigration (British origin only) to both countries from 1869 to 1873:

	Canada.	United States.
1869	29,921	146,737
1870	27,163	153,466
1871	24,954	150,788
1872	24,328	161,782
1873	29,045	166,730

Excepting last year (1879-80), the emigration during these periods has been the largest ever known, and it will be seen that, according to the respective populations, Canada has secured a greater proportion of British emigrants than the United States. But she not unreasonably wants to get still more to occupy the large tracts of country which are yet only very partially inhabited, and thinks, as a British colony, she has a greater claim to them.

I now conclude my report.

A PAPER

CONTRIBUTED

By MR. JAMES RIDDELL,

Of Miami, Manitoba, formerly of Hundalee, Jedburgh, Scotland, who is temporarily staying at the latter address.

It has been suggested by the High Commissioners of the Dominion of Canada that I might write a paper giving my personal experience of Manitoba and the North-West Territory for the benefit of those who are intending to settle there. In doing so I must confine my remarks principally to Manitoba, where I have been for nearly four years. It is impossible to enter into any detailed account of the country without going over much that has already been written, but my remarks will be practical and based upon my own experience. Appreciating the difficulties of the Scotch Tenant Farmers' Delegates in their hurried visit to the country, I will first take the liberty of corroborating generally the statements they have made.

The class of people most likely to succeed in Manitoba and the North-West Territory are those who intend farming, as the country is almost purely agricultural. They would have greater advantages if men of practical experience, and willing to work themselves when necessary. Owing to the richness of the soil crops can be grown with little trouble; still, when farmed according to the rules of good husbandry, it fully repays all extra time and care given to its cultivation. It follows as a certainty that the British farmer is, as a rule, capable of working the land of Western Canada to the best advantage to himself and to the country.

The best time for settlers to arrive depends on their proposed line of action. By arriving in the spring a difficulty arises through the absence of good roads, but this want is now being removed by railway extension westward, and by the province being divided into municipalities, which have the power to assess landholders for the construction of roads and bridges. The amount of assessment on a 320-acre farm ranges from 6 to 8 dollars a year, and if judiciously expended will, within a few years, make substantial roads. To enter on unimproved land and begin work immediately for the purpose of cropping the following year, spring (notwithstanding the state of the roads) is certainly the best time. The roads become good in June, and remain so if the season is dry; during the winter they are of course excellent. But any season would be suitable for the arrival of young men who are in no hurry to begin farming for themselves, and wish to gain information from those who have been some time in the country. Those with families and who possess capital should allow the summer to be pretty well advanced before going to Manitoba.

There are lines of steamships to Canada, sailing from London, Bristol, Liverpool, Glasgow, Londonderry, and Cork, and I can speak as to the comforts and attention to be obtained on board the Liverpool and Glasgow steamers. Through tickets can be had to Winnipeg, the entire trip taking fifteen days.

Passengers by rail in Canada are allowed a certain amount of baggage, about 300 lb. weight; all above that weight is charged extra. It is well to take out personal clothing, such as tweeds (which will be found to be most profitable wear), flannels, blankets, cutlery, or any light household articles. Furniture and heavier goods can be bought in Winnipeg at reasonable prices. A few pairs of boots, not too heavy, without iron, would be found useful. It is only in summer that boots are worn, as moccasons, a kind of shoe made of dressed moose and buffalo hide, are used during winter.

On arrival at any of the ports, there are in waiting a staff of customs officials who do their duty agreeably, and all made-up clothing for personal use, and settlers' effects, are passed free of duty. When once your baggage is into the hands of the railway officials, you are relieved from further care of it, as a 'check' system is in use, which has been found to work satisfactorily. Every parcel is numbered, a check with a duplicate number is given to the owner, and on presenting this at the end of your journey your baggage is handed to you.

Now that the railway system is extended to Winnipeg, that city is perhaps the best centre for settlers to make for. On arrival, ample accommodation can easily be found at moderate charges. Settlers should be on their guard against persons who have land to sell, and on no account

should they make a purchase until the land has been viewed, as many have been disappointed under the circumstances.

The selection of a location depends on the inclination of the settler, as well as the amount of money at his disposal. It is necessary to find out the prices of land in the different districts, which can be obtained on application at the Government Land Offices at Winnipeg, and elsewhere, or from the Land Regulations issued by the Department of the Interior. The Canadian Government have made provision for the sale of lands extending 110 miles on each side of the proposed Canadian Pacific Railway, through Manitoba and the North-West Territories; and until final survey they have assumed a line running in a westerly direction from near Winnipeg. This district is divided into belts. The first belt of 5 miles on each side of the line is called A, and is sold at 5 dollars per acre; a belt of 15 miles (B) on each side adjoining belt A, at 4 dollars; a belt of 20 miles adjoining belt B, at 3 dollars per acre, and so on until the 110 miles are disposed of, the price decreasing the further the land lies from the railway. The above regulations apply to about one half of the area taken in, which is to reimburse the cost of constructing the railway, the other half being open for homesteads (free-grant lands) and pre-emptions (sold at half the price of railway lands) of 160 acres each, excepting school and Hudson's Bay Company's lands, for which 4 square miles are retained out of every township (36 square miles). It is usual for those who wish for more than 320 acres of homestead and pre-emption to buy a piece of the adjoining railway land. The railway lands adjacent to the line, although held at 5 dollars per acre, in many cases are not so valuable as some 50 or 60 miles away, for the reason that unless the land is dry and loamy it is not so easy to work. Those who settle at a distance from the Canadian Pacific Railway may be fortunate enough to be within easy reach of some of the Colonisation Railway lines, which are being made to act as feeders to the main line.

The plan of survey is so simple, that when anyone meets with land on which he may desire to locate, its position is easily determined. The whole country is divided into townships of six miles square, each of these is divided into squares of one mile, which are again divided into four squares of 160 acres. Around every square mile a road is laid of about 100 feet wide. All surveys start and are numbered from the International boundary line.

The land along the Red and Assiniboine Rivers is heavy, strong clay, and in wet seasons is difficult to work; but with a dry spring and summer good crops can be grown. It is unlike the rolling prairie to the West, with its rose-bush and buffalo grass—unfailing marks of good dry, loamy land—where the soil is from 2 to 4 feet deep and is neither more nor less than decayed vegetable matter, resting on a layer of sand, with a subsoil of heavy blue clay. These dry prairies are naturally drained by shallow ravines and small streams, which now and again spread themselves out, forming a marsh or hay meadow. On land as described timber is generally deficient, but the Government has taken the precaution to reserve timber lands with a view to sell to settlers on homesteads and pre-emptions to the extent of ten to twenty acres, according to quality. This arrangement has been a great boon to the community.

It must be admitted that there is a deficiency of spring-water on the surface, but by sinking wells from ten to twelve feet a plentiful supply can be obtained. In the neighbourhood of running streams wells are not necessary, as the stream water is wholesome and pure. These dry lands are most preferable for settlement, and settlers would do well to locate there. A good deal has been written about the wet lands in Manitoba; and, no doubt, up to the present time they have formed a hindrance to settlers along the Red River Valley, but now that the Government are undertaking the drainage it will be to a great extent remedied, and the richness of the soil and the cheapness of the land will make it to the settlers' advantage to continue in the same direction.

Keeping in view that this paper is designed for the guidance of parties intending to settle in Manitoba or the North-West Territory, it may be necessary to allude to the mode of starting on a homestead. If the location is entered upon in spring, the party ought either to board with some neighbour, or, as is often done, tent out for the summer. This arrangement causes no delay in preparing the prairie for the following year's crop. The erection of house and other buildings can be left till the fall. As a rule, oxen are employed for the first year or two, until oats are grown for the keep of horses. It does not require a large capital to commence farming comfortably on a free-grant claim with the intention of gradually reclaiming it; the following is the usual outlay:

Two yoke of oxen	$260·00
One waggon	80·00
Two ploughs and harrow	58·00
Chains, axes, shovels, etc.	30·00
Stoves, beds, etc.	60·00
House and stables	200·00
Mowing-machine	80·00
Cow	35·00
Provisions for one year, say	150·00
	$923·00 = £193

Of course many men start on a smaller scale than this, with one yoke of oxen, one plough, and without a mowing-machine.

If land is purchased from the Government or private parties the price paid will require to be added to the above. Wild lands can be bought from private parties at from 2 to 5 dollars per acre, according to location. Those with larger capital would do well to buy some improved farm with 50 or 100 acres ready for crop, with dwelling-house and stabling. In this way a return is got at once for the outlay, and at the same time saves many of the hardships one must naturally meet with in settling on a bare prairie. These improved farms can often be bought for less than the cost of improvements.

On an improved land the following is the mode of preparing for crop: The grass must be allowed to grow for some time, say till the middle of May, then plough about two inches deep, and ploughing can be continued till about the beginning of July. This is allowed to lie until the end of September, when it is turned back with an inch or two of extra soil. In this state it is ready for seeding with wheat or other crops. Care should be taken not to plough too deep either the first or second time—a mistake farmers from the Old Country invariably make, and thereby cause an excessive growth of straw. Linseed is grown with great success on the first ploughing in June, the seed being of much importance in stock-rearing. The land being dry, as soon as the snow melts and the frost is a few inches out of the ground the following spring, wheat should be sown; barley and oats in succession. Broadcast machines, eight or nine feet wide, with light cultivators attached, are chiefly in use, and have been found to make a great saving in seed. The quantities sown with this seeder are: Wheat, 1 bushel and 1 peck per acre; oats, 2 bushels; and barley, 1½ bushel. Vegetation is rapid, and harvest is generally begun about the middle of August. The reapers in use are all self-binding or self-delivering. They are lighter than the English make, but are capable of doing a deal of heavy work. Wheat requires to be bound almost as soon as cut, the straw being dry and brittle; but oats are usually allowed to lie a day before lifting. The Canadian system of lifting and binding is a decided improvement on the English or Scotch style: one man makes the band, lifts and binds his own sheaf. On a good average crop of wheat (say 25 bushels per acre), four men can lift and bind to a self-delivering machine, cutting 10 to 12 acres per day. After June or July almost no rain falls, consequently grain stacks are not thatched, but are thrashed as soon as ploughing is stopped by frost. Travelling machines, with horse or steam-power, are for hire, and are paid by the bushel or the acre. Owing to the number of emigrants coming into the country, the towns and villages springing up, and the construction of railways, the market for wheat is local; but by the time there is a surplus, railway communication will be opened so as to admit of its being sent to Great Britain and elsewhere. Wheat at 75 cents per bushel would amply repay the grower in Manitoba, and, at present prices in London or Glasgow for American wheat, would leave a large margin for freight and other expenses.

I will here state the cost of raising wheat per acre on our own land for the years 1879 and 1880, likewise the average amount of produce for these two crops.

First, the cost, which I shall give at contract prices:

Ploughing			$2·00
Seed			·90
Sowing and harrowing			·50
Harvesting	Reaping	·65	2·95
	Binding	·85	
	Stocking	·35	
	Carrying and stacking	1·10	
Thrashing			1·70
		$8·05 = £1 13 1	
Average of crops for 1879-80, 28 bush. per acre at 75 c.		21·00 = £4 6 3	
		$12·95 = £2 13 3	

Cost of production per bushel, 1s. 3d., leaving a margin of nearly 13 dollars per acre.

This certainly is above an average yield for Manitoba at the present time, but I believe that with good management and fair seasons, the average will come up to this or even more.

If I mistake not, the two Royal Commissioners, Messrs. Read and Pell, stated that wheat could not be sent from Manitoba to Liverpool to pay the grower below 47s. per quarter; I have been unable to get a definite quotation of freights from Winnipeg to Liverpool or Glasgow, but the following is an approximate:

Wheat has already been sent from Winnipeg to Montreal—by rail to Duluth, thence by steamer to Montreal—at 30 cents per bushel. From Montreal to Glasgow freights for wheat have ranged from 68 cents to 1 dollar 44 cents per quarter, say on an average 1 dollar 6 cents. This gives

From Winnipeg to Montreal 30 cents per bushel	$2·40	per quarter.
„ Montreal to Glasgow	1·06	„
Insurance, landing charges, etc., including weighing and allowance for shorts	·36	
	$3·82 = 15s.	9d.
Cost of production per quarter	10	0
Total cost per quarter	25s.	9d.

If these rates are correct—and I have every reason to believe they are—it is evident Messrs. Read and Pell have been led into error in their statements. American wheat at the present time is worth 53s. per quarter in Glasgow, which shows a large margin for the growers' profit in Manitoba. As soon as the Canadian Pacific Railway and the Hudson's Bay routes are open, there cannot be a doubt that the cost of transit will be reduced.

Cattle-rearing is likely to pay well, as it is attended with little expense. They keep their condition through the winter (where wind-brakes are provided) on marsh hay, and this can be had in abundance in almost any kind of season. It is cut in July or August, the earlier the better fodder it makes. The marshes are level, and mowing machines make good work in the cutting. The expense of making this hay does not exceed 1 dollar per ton, and the usual winter allowance per head of various ages is 2½ tons. At present, cattle are allowed to graze on any unfenced land during the summer, and find any amount of feed, such as wild tares, peas, and grasses. The best season for cows to calve is about the end of April. Young cows are worth 35 dollars per head; a three-year-old steer ready for work, 50 to 60 dollars.

Sheep can also be raised with profit. They can be kept during the winter without covering, and get fat on hay grown on dry prairie, this being finer than the marsh hay. A cross between the Lincoln and Cotswold will be found as profitable as any. Mutton is worth 12 cents per lb., and wool 30 to 35 cents.

The climate has been represented as being almost impossible to live in. It must be admitted that the winters are more severe than in Britain, but the air is so clear and dry that the cold is not much felt.

Writers on Iowa and other States seem to attach much importance to the severity of our winters, but it must be borne in mind that most of them have never experienced a winter in Manitoba. I have noticed a letter in a Scotch newspaper from a Mr. Lauder, Dunfermline, giving a most alarming account of the climate and soil of Manitoba. I find that many of the statements he makes are quite incorrect, and no wonder, as he was only there for a very short time during summer on a hunting expedition. As an instance of his inaccuracy, he states that there are eight months of winter and only four of summer, instead of this there are four and a half months of winter, and the rest spring, summer and autumn!

I have no idea of entering into the comparative merits of Manitoba with Iowa, or any other country, but it would be an injustice if I did not add my testimony to the advantages of Manitoba as a field for emigration. It has been said that Manitoba and the North-West Territory will be the granary of the world, and its rapid development, the amount of capital and skill which is being expended on the cultivation of its soil, and the towns and villages that have sprung up, are all strong evidences of the progress that has been made.

Winnipeg, in 1874, had a population of only 5,000 inhabitants, while now it is fully more than double.

Emmerson, Portage la Prairie, Nelsonville, and Rapid City, and many other villages, have also become places of importance.

With the privileges offered in Manitoba and the North-West Territory, where free grants of land are offered to the agriculturist, where land can be purchased for less than is paid in Britain for merely occupying it, where all improvements are one's own, where education is free, and, in fact, where nearly all the comforts of the Old Country are to be had, it is surprising, at this time of continued depression in British farming, how few have availed themselves of such a favourable opening.

EXTRACTS FROM THE REPORT OF MESSRS. CLARE SEWELL READ AND ALBERT PELL, M.P., UPON CANADA AND THE UNITED STATES, PRESENTED TO BOTH HOUSES OF PARLIAMENT BY COMMAND OF HER MAJESTY, IN AUGUST, 1880.

CANADA.

Upon the arrival of the *City of Montreal* at New York, we were waited upon by the Hon. Robert Read, senator, with an invitation from the Canadian Government to visit Ottawa, and make a prolonged tour in the Dominion. We were compelled to decline the greater part of this kind invitation, but Mr. R. Read courteously assisted us in our investigations in New York, and remained our guide and companion till we left Toronto.

Many of the general agricultural remarks that have been made apply equally to Canada and the United States. It will be only possible now to say a few special words upon the farming of the Dominion of Canada. We had not time to visit Lower Canada, nor did we see very much of Ontario. The arable farming around Toronto is decidedly in advance of anything we saw in the United States. The cultivation strongly resembled that of England, and for cleanliness and produce would compare favourably with some of its well-farmed districts. The soil is deep and fertile. The country has almost all been reclaimed from the primeval forest, and the labour that has converted that woody region into miles of smiling corn-fields, must have been no easy task. But in the great North-West, the country so recently opened to the over-populated countries of the Old World, there is no forest to subdue, or scrub to uproot. The whole is one vast plain, more or less fertile, which can be converted into a grain-field by the simple operation of two shallow ploughings. The soil around Portage la Prairie is a rich black loam, light of tillage, yet sufficiently retentive to withstand severe drought. In many places there appeared little or no variation to the depth of three feet. In some spots the land is swampy and low, but a few main dykes would dry many hundred acres, and with a soil so friable, no drainage for surface water could possibly be required. This vast region, called by some 'the future wheat granary of the New World,' had not in September last the advantages of any railway. In this respect Canada seems greatly in arrear of the United States. While in the latter country railroads, made sometimes with English capital, are run through a country almost unpopulated in order to develop it, in the Dominion no railroad is made until it has a population on or beyond it that may be expected to pay the working expenses of the new line. It may be that the original shareholders of the pioneer railroads of the States are often sacrificed, and their line is sold for a small sum to some wealthy company. But if Canada is to be developed with a rapidity approaching that of the United States, the Dominion Parliament must spread its railway system somewhat more quickly. A far-seeing policy must anticipate eventual profits from opening a now inaccessible though rich region, rather than expect immediate payment from the traffic along the new lines of railroad that must soon be made.

Much has been said against the long and severe winters of Manitoba. No doubt the cold is intense, and that for well-nigh five months in the year all field-work is suspended. But it is a crisp dry cold that is not so unpleasant, and with the first sharp frost and fall of snow the roads that were before impassable become excellent highways for the cartage of timber and of grain. No doubt the grasshoppers did in the years 1875 and 1876 destroy the few cereal crops of the early settlers. But should they again invade the territory, it is confidently expected that with the increased acreage planted with grain, their ravages must be distributed over a much larger area, and will not be so severely felt. It is also argued that no Indian-corn can be produced in that northern latitude, and therefore it will never be a region of cattle and of sheep. Certainly stock must be housed during the winter months, and provender of some kind must be grown to feed them during that long and dreary season. But there is no reason why abundant crops of natural hay and artificial grasses, such as timothy, rye-grass, clover, and Hungarian millet should not be grown in great abundance, and the deep and friable soil seems well adapted for the cultivation of mangels and other roots.

No man should emigrate to the Far West who is not prepared to work hard and live hard. He may successfully transplant an English family into this region of 'rude abundance,' but he cannot expect to take with him the comforts of an English home. For years all new settlers, but

especially the females, must expect to rough it. The old, the sickly, and the faint-hearted should never emigrate, however poor and sad their lot may be in the Old Country. But to the young, the vigorous, and the courageous, who cannot get a comfortable living in England, Manitoba offers a home that will soon provide all the necessaries of life, and in a few years of steady and well-directed toil, will probably ensure a competency, and possibly a moderate fortune. It may be a very good country for a farm labourer to settle in, but it appears especially adapted as a field for the practical hardworking stalwart young farmer who has a few hundred pounds in his pocket, and who would know how to spend it to the best advantage.

In the Appendix will be found the Government regulations, recently issued, respecting the disposal of public lands for the purposes of the Canadian Pacific Railway. The Order in Council of November, 1877, is now cancelled, and settlers who had taken up land under the order are to be dealt with, and their claims adjusted under the new provisions, which certainly are more encouraging to settlement than the old ones. We have also added in the Appendix a short account of the land system of the different provinces of the Dominion.

To those who could not endure the rough life of the West, there are many farms of 100 or 200 acres to be bought in Ontario and Lower Canada at from 50 to 100 dollars an acre. These farms may be near a good town or railway, and are well fenced, and upon which decent farm-houses and suitable buildings have been erected. There are also in those localities sundry such farms to let at from 3 dollars to 5 dollars an acre ; or they can be hired by the tenant paying the rent in kind by a fixed portion of the produce, while occasionally the farm is worked in shares, the landlord finding all or a portion of the live stock of the farm. This may be an easy means for a farmer without capital to work his way up, but it seldom leads to any permanent friendly relations between landlord and tenant.

Our regret at not being able to describe more fully the agriculture of Canada is considerably modified by the fact that in the autumn of last year 14 tenant farmers' delegates from Scotland and the north of England visited the Dominion, and have since written a series of most useful and exhaustive reports. These reports have been freely circulated by the Department of Agriculture of the Canadian Government, and their contents are widely known. But there was one great feature of Canadian farming, viz., its dairy produce, which seemed to us to require some special notice, and we have therefore to call attention to the separate report of Mr. John Clay, junior, upon this subject, which will be found in the Appendix.

The following is a short SUMMARY of the LAND SYSTEM of the different PROVINCES of the DOMINION OF CANADA :

In Manitoba and the North-West Territories free grants of 160 acres are given to any head of a family, male or female, or to any person over eighteen years of age, on condition of three years' settlement from time of entry. For the necessary documents for the registration and taking up a free grant the fee is 10 dollars, payable when the title is issued. A person entering for a homestead may also enter the adjoining quarter section (160 acres), if vacant, as a pre-emption right, and enter into immediate possession thereof, and on fulfilling the conditions of his homestead, may obtain a patent for his pre-emption right on payment for the same at the rate of 1 dollar per acre, if outside the railroad belts, but if within such belts, at the price set forth in the regulations, the maximum price being 2 dollars 50 cents per acre (10s.).

Free grants of land are also made for the culture of forest trees outside the railway belts, in addition to the homestead, but settlers cannot take up the pre-emption land as well as the grant for the culture of trees.

The Legislature of Manitoba, in 1872, passed a Homestead Exemption Law, which in addition to exempting from seizure for debt the debtor's goods, as follows :—furniture, tools, farm implements in use, one cow, two oxen, one horse, four sheep, two pigs, and thirty days' provender for the same ; also enacts that his land to the extent of 160 acres shall be free from seizure, as also the house, stables, barns, and fences on the same, in the case of all writs issued by any court in the province.

Free grants of from 100 to 200 acres are also made in the provinces of Ontario and Quebec on residential conditions, and they also have homestead exemption laws, but not quite so liberal as that of Manitoba. Lands can also be purchased in these provinces at reasonable rates.

There is also land available for settlement in Nova Scotia, New Brunswick, and British Columbia on very reasonable terms.

EXTRACTS FROM THE CHAPTER OF THE 'COLONIZATION CIRCULAR' RELATING TO CANADA.

Issued by the Imperial Colonial Office.

DOMINION OF CANADA.

Canada: general description, extent, climate, etc.

The Territory comprised in the Dominion of Canada contains about 3,500,000 square miles, extending from the Atlantic to the Pacific Ocean, and at its southern point reaching the 44th parallel of latitude. It possesses thousands of square miles of the finest forests on the Continent; widely spread coal-fields, extensive and productive fisheries; its rivers and lakes are among the largest and most remarkable in the world, and the millions of acres of prairie lands in the newly opened-up North-West territories are reported as being among the most fertile on the continent of America.

Local Government.

Canada is divided into seven Provinces. Each Province is divided into Counties and Townships, having their own Local Boards, and Councils, for regulating local taxation for roads, schools, and other municipal purposes.

Religious liberty prevails.

Education.

The Educational system is under the control of the Governments of the various Provinces. Free schools are provided, and facilities are afforded to successful pupils for obtaining the highest education.

Population.

The population at the last census (in 1871) was 3,602,596. Among its inhabitants there were 219,451 natives of Ireland, 144,999 of England and Wales, 121,074 of Scotland, 64,447 natives of the United States, and 24,162 natives of Germany. The census will be taken again in 1881, when the population will no doubt be found to have much increased.

Trade.

The following figures show the imports and exports for the fiscal year ending June 30th, 1880, and also the value of the exports to, and imports from, the United Kingdom during the same period.

Value of Imports	$86,489,747
Value of Exports	87,911,458
Exports to the United Kingdom	45,846,062
Imports from the United Kingdom	34,461,224

An examination of these figures, compared with those of the United States, shows that the imports of Canada from Great Britain, in proportion to the population, represent 32s. per head, as against 8s. 4d. per head in the United States.

Climate.

In a country like the Dominion of Canada, extending northward from the 44° of latitude, the climate is naturally variable; but speaking generally, the summers are hotter than in England and the winters colder. However, if the climate of a country is to be measured by its productions, then Canada, in the quality of her timber, grains, fruits, plants, and animals, must be accorded a front rank.

The extremes of cold, though of short duration, and the winter covering of snow, have given Canada the reputation of having an extremely severe climate, and attention has not been sufficiently directed to the circumstance that by the warmth of the summer months, the range of production is extended, in grains, from oats and barley to wheat and maize; in fruits, from apples to peaches, grapes, melons, nectarines, and apricots; in vegetables, from turnips, carrots, and cabbages, to the egg-plant and tomatoes.

Snow and ice are no drawback to the Canadian winter. To Canada they mean not only protection to her cultivated acres, almost as valuable as a covering of manure, but the conversion of whole areas, during several months in the year, to a surface upon which every man may make his own road equal to a turnpike, in any direction, over

swamp or field, lake or river, and on which millions of tons are annually transported at the minimum cost, whereby employment is afforded for man and horse when cultivation is arrested by frost.

Intensity of winter cold has little effect upon the agriculture of a country except the beneficial one of pulverising the soil where exposed. High spring and summer temperatures, with abundance of rain, secure the certain ripening of maize and the melon in Canada.

The difference between the mean annual temperature of the Atlantic and Pacific coasts of Canada for the same latitude is very great, that for the latter being much higher, and thus wheat is raised with profit in lat. 60° N., long. 122° 31′ W. In Manitoba in lat. 49° 30′ N., long. 97° 30′ W., wheat is sown in May and reaped the latter end of August, after an interval of 120 days.

The great prairie region of Canada has a mean summer temperature of 65°, with abundance of rain; the winters cold and dry; climate and soil similar to that part of Russia where large cities are found. It is free from pulmonary complaints and fevers of every type, and the country generally is healthy.

The snow-fall in the West and South-West parts of the Territories is comparatively light, and cattle may remain in the open air all the winter, subsisting on the prairie grasses, which they obtain by scraping away the snow where necessary.

Means of communication.

There are nearly 7000 miles of railway in work in the Dominion, extending from the western portions of Ontario to Halifax in Nova Scotia, and St. John in New Brunswick, while its rivers and lakes form a highway during the summer months from the interior to the ocean.

It may be mentioned that Canada possesses the most perfect system of inland navigation in the world. At the present time vessels of 600 tons go from Chicago to Montreal by way of Lakes Michigan, Huron, Erie, Ontario, and the River St. Lawrence, a distance of 1261 miles. The locks on the Welland Canal (connecting Lakes Erie and Ontario) and those on the St. Lawrence River are, however, in course of enlargement to 270 feet long and 45 feet wide, with a depth of 14 feet; and when this great work is completed, steamers of 1500 tons burthen will be able to carry produce direct from Western Canada and the Western States of America to Montreal and Quebec, which will effect a further reduction in the cost of transit of cereals and other products.

The distance from Chicago to Montreal (where ocean-going steamers of 4000 tons can be moored alongside the quays), by the Canadian route, is 150 miles less than from Chicago to New York, *viâ* Buffalo and the Erie Canal, and there are 16 more locks and 89½ feet more lockage by the latter route than by the former. It is therefore expected that upon the completion of the enlarged canals, within two years, much of the grain from Western Canada, as well as from the Western States of America, will find its way to Europe *viâ* Montreal, as, in addition to its other advantages, the distance from Montreal to Liverpool is about 300 miles less than from New York.

Postal and Telegraph arrangements.

Canada possesses excellent postal arrangements: a post-office being found in almost every village, and every place of any importance is connected with the electric telegraph.

Time to emigrate.

The best time to arrive in North America is early in May, when the inland navigation is open, and outdoor operations are commencing. The emigrant will then be able to take advantage of the spring and summer work, and to get settled before the winter sets in.

Time of transit.

The voyage to Quebec occupies on an average about ten days by steamer, and the journey to the North-West four days longer.

It is now proposed to offer a few remarks on each of the different provinces of which the Dominion of Canada is composed.

MANITOBA
AND
THE NORTH-WEST TERRITORIES.

Manitoba and the North-West Territories.

The country now known as Manitoba and the North-West Territories was granted by charter to the Hudson Bay Company, in 1670, during the reign of Charles II., as a hunting and trading ground, and was held by them and the North-West Company (these two corporations amalgamated in 1821) until 1870, when their rights were transferred to the Dominion. These facts form an intelligible reason why this part of the country has only recently become known as an agricultural region; for the disturbance of the lands would naturally have led to the interruption of the staple trade of the company which controlled it for so many years.

Extent of Manitoba and the North-West Territories.

Manitoba, a province which has been made out of the North-West Territory, is situated between the parallels 49°—50° 2′ north latitude and 96°—99° west longitude, in the very heart of the continent of America. It is 135 miles long and 105 miles wide, and contains in round numbers 14,000 square miles, or 9,000,000 acres of land.

Roughly speaking, the North-West Territories belonging to Canada cover about 2,500,000 square miles, and contain about 200,000,000 acres of fertile land, which are now waiting settlement.

Free grants of land. Manitoba and the North-West Territories.

Any male or female who is the head of a family, or any person who has attained the age of 18 years, can obtain a free grant of a quarter section of 160 acres; and can also make an entry for pre-emption rights to the adjoining quarter section, at the Government price ranging from one dollar per acre upwards.

Lands can also be purchased along the line of the Canadian Pacific Railway at prices ranging from 4s. to £1 per acre, according to distance from the railway.

Guides.

Intending settlers should go at once to the Land Office in the district where they intend to settle: and guides will be sent with them free of charge to point out vacant lands available for settlement.

Capital required.

The following is the amount of capital considered necessary for a man with a family to start farming on a free grant of prairie land. It has been compiled from various works that have been published on Manitoba and the North-West Territory, and may be accepted as reliable.

Provisions for one year	$200
One yoke of oxen	130
One cow	30
One waggon	80
Breaking plough and harrow	30
Chains, shovels, spades, hooks, etc.	20
Cooking stove and furniture	30
Seeds	20
Building contingencies, etc.	60
	$600 or £120.

It is of course based upon the assumption that all payments for goods are to be made on delivery, but as a settler could obtain many of his requirements on credit until such time as his first crops are harvested, it is fair to assume that a much lower sum than that named above would really suffice, especially as a settler and his family who have not much capital would be able to command a good price for their own labour during harvest time, and thus add to their capital until they have a sufficient quantity of their own land under cultivation to keep them fully occupied.

It may be added that an energetic man landing in Canada with only a pound or two in his pocket is able to look at the future cheerfully. Many such men have taken up the free grants, and then have hired themselves out to labour, cultivating their own land during spare time, and employing a man at harvest or when necessary. By this means they are able to stock and cultivate their farms in a few years, with the results of their own labour and the profits of their harvests, and there are many men in Canada now in positions of independence who commenced in the way above described.

It will be understood that the figures named above do not include the passage of the settler and his family from England to Manitoba and the North-West.

Cost of breaking up land.

The cost of breaking up the prairie land is estimated at 3 dollars per acre, and the ploughing, sowing, harvesting, and thrashing, the second year, 4 dollars per acre.

Improved farms.

Improved farms can be purchased from £1 per acre upwards.

Fuel.

There is not so much woodland in the prairie districts as in other parts of Canada, but there is enough for the purposes of fuel and fencing, and timber for building purposes can be purchased in the larger towns and settlements.

Canadian Pacific Railway.

This line of railway, which is to connect the Atlantic and Pacific Oceans, is now in course of construction by the Government of the Dominion, and is expected to cost from 75 to 80 millions of dollars. Two hundred and sixty miles of the line are now in operation. This will be increased by about five hundred in 1881, and in 1882 over seven hundred miles will be open, extending from Lake Superior through Manitoba and westward through the Territories to near Fort Ellice, thus effecting a saving in the distance from Manitoba and the North-West Territory to the ports of shipment for Europe of about four hundred miles, as compared with the existing route from the Western States of America, *viâ* New York. This railway will pass through extensive coal-fields, which will ensure an unlimited supply of fuel.

Routes and internal communication.

It may be mentioned that there are two routes by which an intending settler can reach Manitoba from Quebec, or any other Canadian Port, namely the 'all rail route,' *viâ* Detroit, Chicago, and St. Paul to Winnipeg, or by what is called the Lake route, *i.e.* by railway to Sarnia or Collingwood on Lake Huron, thence by steamer to Duluth on Lake Superior, and by rail from Duluth to Winnipeg. The journey by the former route is quicker by about a day, but the latter is more economical. By either of these routes the settler will be met by the Agents of American Land and Railway Companies, who will endeavour to persuade settlement in the United States as preferable to Canada; but the settler is advised to proceed direct to his intended destination, and decide upon his location after personal inspection. In 1882 a line of railway will be completed from Thunder Bay (Lake Superior) to Winnipeg and westward. It will pass entirely through Canadian Territory, and its benefits both to new and old settlers will be very great. It may be added that most of the rivers and lakes in Manitoba and the North-West are navigable, and that steamers now ply during the season on the River Saskatchewan, between Winnipeg and Edmonton, a distance by water of about 1200 miles, with passengers and freight, calling at Prince Albert, Carlton, Battleford, and other places on the way. Steamers also run regularly between Winnipeg, St. Vincent, and other places on the Red River. There is also steam communication on the River Assiniboine, between Fort Ellice and Winnipeg.

Climate.

Manitoba is situated in the middle of the continent, nearly equi-distant from the Pole and the Equator, and the Atlantic and Pacific Oceans. The climate gives conditions of decided heat in summer, and decided cold in winter. The snow goes away, and ploughing begins in April, which is about the same time as in the older provinces of Canada and the Northern United States on the Atlantic seaboard, and the North-Western States of Minnesota and Wisconsin. The crops are harvested in August. The long sunny days of summer bring vegetation of all sorts to rapid maturity. The days are warm and the nights cool.

Autumn begins about the 20th of September, and lasts till the end of November, when the regular frosts set in. The winter proper comprises the months of December, January, February, and March. Spring comes early in April. The summer months are part of May, June, July, August, and part of September. In winter the thermometer sinks to 30 and sometimes 40 degees below zero; but this degree of cold in the dry atmosphere of the North-West does not produce any unpleasant sensations. The weather is not felt to be colder than in the province of Quebec, nor so cold as milder winters in climates where the frost, or even a less degree of cold than frost, is accompanied with damp or wind. The testimony is universal on this point.

Snow does not fall on the prairies to an average greater depth than eighteen inches; and buffaloes and horses graze out of doors all winter. Horned cattle also graze out of doors part of the winter, but in some states of the weather they require to be brought in. Instances are, however, stated, in which horned cattle have grazed out all the winter.

The following table represents the mean temperatures of Winnipeg, Toronto, and Battleford, for each month of the year ending July, 1879:

	Toronto.	Winnipeg.	Battleford.
August	66·38	67·34	67·79
September	58·18	52·18	47·10
October	45·84	35·84	34·52
November	36·06	30·66	28·66
December	25·78	11·97	6·48
January	22·80	—6·10	0·45
February	22·74	—12·32	—10·25
March	28·93	14·14	16·80
April	40·72	39·10	46·70
May	51·74	53·13	53·35
June	61·85	63·20	60·45
July	67·49	68·19	63·95

It will be noticed that from Toronto westward, the temperature rises during the summer months, and as the average yield of wheat per acre in Manitoba and the North-West is equally as large (if not larger) both in quantity and in weight as in the United States, it would seem that in conjunction with the fertility of the soil, this temperature is very favourable to cereal crops. The fall of snow is also less in the Western portion of the Dominion. In the first half of the year 1876 it was 28½ inches, and in the second half 29¾ inches; but the snow is no drawback to the growth of the crops, which are sown in April and May, and harvested in August and September.

Soil.

The soil is a deep alluvial deposit of unsurpassed richness. It is mostly prairie, and covered with grass. It produces bountiful crops of cereals, grasses, roots, and vegetables. So rich is the soil that wheat has been cropped off the same place for forty years without manure, and without showing signs of exhaustion.

The following extracts from the reports of the English and Scotch farmers, selected by the farmers in their respective districts, who went out to Canada in 1879 to report upon the country, are interesting and reliable on this subject:

MR. BIGGAR, *The Grange, Dalbeattie.*

'As a field for wheat-raising, I would much prefer Manitoba to Dakota. The first cost of the land is less; the soil is deeper, and will stand more cropping; the sample of wheat is better, and the produce five to ten bushels per acre more, all of which is profit.'

MR. GEORGE COWAN, *Annan,*

speaking of Mr. Mackenzie's farm, at Burnside, says: 'I was certainly surprised at the wonderful fertility of the soil, which is a rich black loam, averaging about 18 inches of surface soil, on friable clay subsoil, 5 and 6 feet in depth, beneath which is a thin layer of sand, lying on a stiff clay. The land is quite dry, and is well watered by a fine stream which flows through it.'

* * * * * * * *

'The land between Rapid City and the Assiniboine, which lies to the southward, 25 miles distant, is a nice loam with clay subsoil on top of gravel. I was very highly impressed with the fertility of the soil, some of it being without exception the richest I have ever seen, and I have little doubt it will continue for many years to produce excellent crops of grain without any manure, and with very little expense in cultivation.'

MR. JOHN LOGAN, *Earlston, Berwick,* says:

'All the land round this district (Assiniboine) is very good, being 4 feet deep of black loam, as we saw from a sandpit.'

MR. JOHN SNOW, *Midlothian.*

'Along the Red River and about Winnipeg the soil is very strong black vegetable mould, and I have no doubt most of it would carry paying crops of wheat for thirty years; but it is very flat, and I must say that I like the country better west of Winnipeg, and the furthest point we reached, 150 miles west of Winnipeg, best of all. You have here the Little Saskatchewan River, with fine sloping ground on each side; the soil, and what it produced, was good, as you will see from the samples of each I now show you. I also show you samples from other parts; and, as I will show you further on, the Americans themselves admit that we have ground better adapted for growing wheat and raising cattle than they have.'

* * * * * * * *

'We saw that a black vegetable mould covered the surface from 18 inches to 2, 3, or 4 feet deep.'

MR. ROBERT PEAT, *Silloth, Cumberland.*

'*Soil.*—Contrary to my expectations, instead of finding a wet swamp, as I pictured to my own mind, I found a deep black loamy soil, varying in depth from 2½ to 3½ feet; and in some places where it has been cut through on the banks of some rivers, it has been found to the depth of 10 to 12 feet, and is specially adapted for the growing of wheat, being preferred by the millers to almost any other on account of it being so dry and thin skinned. It has been known to grow wheat for many years in succession, without manure. If the report was correct, the soil I have sent down to you has grown wheat for thirty years, and the last crop yielded 35 bushels per acre.'

MR. JOHN MAXWELL, *Carlisle.*

'The soil throughout the country is a rich black loam, 6 inches to 6 feet deep, almost entirely free from stones, and varying in quality in different districts, on a subsoil of strong or friable clay or sand.'

Average crops.

The average wheat-yield in Manitoba and the North-West would appear to range from 20 to 30 bushels per acre, and the weight from 60 to 63 lb. per bushel. Barley and oats yield good averages, as also potatoes and other root crops.

The following figures, taken from the reports of the delegates of the English and Scotch tenant farmers, may also be found interesting on this point:

MR. JAMES BIGGAR, *of The Grange, Dalbeattie,* says:

'We heard very different statements of the yield of wheat, varying from 25 to 40

bushels. McLean, a farmer near Portage, had 1230 bushels of Fife wheat off 40 acres. Another man, a native of Ross-shire, who was ploughing his own land, told us he had cropped it for seventeen years in succession, his last crop yielding 35 bushels per acre. Mr. Ryan, M.P., a good authority, said the average of wheat might safely be taken at 25 to 30 bushels, and of oats 60 bushels. . . . Next day we drove over Messrs. Riddle's farm; their wheat has averaged fully 30 bushels per acre.'

MR. GEORGE COWAN, *Glenluce, Wigtown*, says:

'Mr. Mackenzie's farm is at Burnside, about 9 miles from Portage la Prairie. . . . He favoured me with his average for the seasons of 1877 and 1878, and his estimate for the present year. Wheat crop, 1877, 41 bushels; 1878, 36 bushels; this year (1879) he expects it to be close on 40 bushels, average weight 60 to 62 lb.; but he has grown it as high as 64 lb. per bushel. Oats last year (1878) he had a yield of 88 bushels from two bushels of seed sown on one acre; this year (1879) his estimate is from 75 to 80 bushels per acre. Mr. M. also grows excellent root crops, his swede turnips averaging 30 to 35 tons; and potatoes without any care in cultivation, sometimes even not being moulded up, yield between 300 and 400 bushels of 60 lb. Onions when cultivated are also very prolific, yielding as much as 300 bushels per acre. Mangel also grows very heavy crops, but I did not see any on the ground.'

* * * * * * * *

'We spent a short time on the farm of Mr. McBeth, and walked over a field which I was informed had been continuously under crop for fifty-four years. . . . I was told it would average 28 or 30 bushels per acre.'

MR. R. W. GORDON, *Annan.*

'Wheat may safely be estimated to yield with reasonable cultivation 30 bushels of 60 lb., and oats 60 bushels of 32 lb.'

MR. LOGAN, *Eurlston*,

speaking of the yield about High Bluff, says: 'The land here has grown wheat for forty years in succession, yielding from 25 up to 40 bushels per acre. There are not many oats sown here, but the general produce is 70 bushels per acre.'

* * * * * * * *

'We arrived at Portage on Saturday afternoon. . . . He told us he had grown good crops at an average of 32 bushels per acre of 60 lb. weight.'

MR. SNOW, *Fountain Hall, Midlothian.*

'I consider I keep safely within the mark when I say that, taking a good piece of land, it will produce 40 bushels the first year, and an average of 30 bushels for thirty years, without manure.'

MR. JOHN MAXWELL, *Carlisle.*

'I give an estimate of the cost of wheat crop in Dakota. The same system may be adopted in the Canadian North-West to advantage, as the average yield, so far as can be learned on present information, will be 8 to 10 bushels per acre higher than the yield in Dakota, United States Territory, and every extra bushel produced tends to reduce the first cost per bushel to the producer.'

All the other delegates confirm these figures.

Homestead Exemption Law.

In Manitoba, a homestead exemption law was passed in 1872, which exempts from seizure for debt 460 acres of land, house, stable, barns, furniture, tools, farm implements in use, one cow, two oxen, one horse, four sheep, two pigs, and thirty days' provender for same.

Tree culture.

Any person, male or female, having attained the age of eighteen years, can enter a claim for a quarter section (160 acres) of unappropriated Dominion lands, as a claim for forest-tree planting, and will receive a patent on certain specified conditions and proof of cultivation. The fee for the necessary documents is 10 dollars. No person can take up both a tree-planting grant and a pre-emption; but either one or the other can be secured in conjunction with the free grants.

Price of labour.

Farm labourers can obtain from £30 to £40 a year and board. Female domestic servants 20s. to 24s. per month with board. Mechanics earn from 8s. to 12s. per day.

Prices.

The following are the prices of horses, cattle, farming implements, and commodities generally:

Horses per pair, about £60; oxen per yoke, £26 to £30; cow, £6 to £7 each; waggons, £16 to £18 each; ox cart, £3 to £4; breaking plough and harrow, from £6 to £8; common ploughs, about £3 12s.; reapers, £20 to £30; mowers, £14 to £25; spades 4s. 6d.; shovels, 5s.; hay-forks, 3s.; manure-forks, 4s. Beef, 5d. to 7d. per pound; pork, 5d. per pound; flour, 24s. per barrel; butter, 1s. per pound; eggs, 1s. per dozen; bread, 4½d. to 5d. per 4 lb. loaf.; salt, 7d. to 8d. per lb.;

potatoes, 1s. 9d. to 2s. per bushel; tea, 2s. to 2s. 3d. per lb.; sugar, 4d. to 6d.; coffee, 10d. to 1s. 6d.; tobacco, 2s. to 2s. 3d. Coal oil, 1s. 9d. per gallon. Pails, three-hoop, 1s. 3d. each. Stout suit of clothing for a man, £2 to £3; felt hats, from 4s.; boots, 8s. to 12s.; grey blankets, 8s. to 12s. per pair.

ONTARIO.

Free grants in Ontario.

Every head of a family can obtain a free grant of 200 acres of land, and any person 18 years of age may obtain 100 acres in the free-grant districts. The conditions are:—15 acres in each grant of 100 acres to be cleared and under crop in five years; a habitable house at least 16 feet by 20 built; and residence on the land at least six months in each year. The patent is issued at the end of five years.

Price of lands.

Uncleared lands can also be purchased at prices varying from 2s. to 40s. per acre.

Improved farms.

Cleared and improved farms with buildings can be bought at from £4 to £10 per acre. The money can nearly always be paid in instalments covering several years.

Soil.

The soil of the country varies in different localities, but a large proportion is of the very best description for agricultural purposes.

Climate.

The climate is much the same as in some other parts of the Dominion; but milder in the winter than in Quebec.

Cereals, grasses, and roots produce large crops, and fruits grow in great abundance; hemp, tobacco, and sugar beet are also profitable crops; maize and tomatoes ripen well, and peaches and grapes come to perfection in the open air.

Means of communication.

The province possesses excellent means of communication both by railways, and by water through the lakes, and the river St. Lawrence, with all parts of the Dominion and to the Atlantic ports.

Education.

The public schools are all free and non-sectarian. All resident children between the ages of 5 and 21 are allowed to attend them.

Cities and towns.

There are several large cities and towns in this province, among others Toronto, Ottawa, Hamilton, London, Kingston, etc.

Minerals.

In mineral wealth it has great resources, producing iron, copper, lead, silver, marble, petroleum, salt, etc. Its immense forests of pine timber are well known.

Manufactures and exports.

Its principal manufactures are cloth, linen, clothing, leather, furniture, sawn timber, flax, iron and hardware, paper, soap, cotton, and woollen goods, steam engines and locomotives, woodenware of all descriptions, agricultural implements, etc. Cattle, sheep, and pigs, dairy and agricultural produce, and fruit are exported largely from this province, and the trade is increasing rapidly.

The rates of wages for farm labourers are from 40s. to 60s. per month, with board and lodging; for common labourers from about 3s to 4s. 2d. a day, without board and lodging; and for female domestic servants from 14s. to £1 4s. per month, all found. Good cooks get rather more.

Provisions are much cheaper than in England or in the United States. Beef, veal, and mutton are from 3d. to 6d. per lb.; pork, 4d. to 5d.; bacon, 6d. to 8d.; bread (best), 4½d. to 5d. per 4 lb. loaf; butter (fresh), 1s.; salt ditto, 7d. to 8d. per lb.; potatoes, 1s. 9d. to 2s. per bushel; tea, 2s. per lb.; sugar (brown), 4d. to 4½d. per lb.; milk, 3d. per quart; beer, 1s. 2d. to 1s. 6d. per gallon; and tobacco, 1s. to 2s. per lb.

QUEBEC.

Free grants in Quebec.

Upon eight of the great colonisation roads, every male colonist and emigrant being 18 years of age may obtain a free grant of 100 acres. The conditions are that at the end of the fourth year a dwelling must have been erected on the land, and twelve acres be under cultivation. Letters patent are then granted.

Crown lands

Crown lands can also be purchased at 30 cents to 60 cents an acre.

Homestead law.

The province has a homestead law exempting from seizure, under certain conditions, the property of emigrants.

Soil.

The soil is of very good quality, and its productions are similar to those of other parts of Canada.

Mines and Fisheries.

Gold, lead, silver, iron, copper, platinum, etc., etc., are found; but mining in this province is only yet in its infancy. Phosphate mining is becoming an important industry. Its value as a fertiliser is recognised in England and France, and large quantities are being exported.

The fisheries are abundant, and in 1876 the yield was of the value of 2,097,677 dollars.

Cities.

The principal cities are Quebec and Montreal, and there are many large towns.

Wages, prices, manufactures.

The remarks made in the case of the province of Ontario will apply to Quebec also.

This is afforded by railways and by the river St. Lawrence. This province contains the two great ports of shipment—Montreal and Quebec, both of which have extensive wharfage accommodation, and ocean-going vessels of 4000 tons can be moored alongside the quays. Means of communication.

NEW BRUNSWICK.

A grant of 100 acres may be obtained by any person upon the following conditions : Free grants, New Brunswick.

On payment of 20 dollars cash to aid in construction of roads and hedges, or labour of the value of 10 dollars per year for three years.

A house to be built within two years. Ten acres to be cleared and cultivated in three years. Proof of residence on the land.

The soil is fertile, and produces all the fruits generally found in England. Wheat averages about 20, barley 29, oats 34, buckwheat 33, rye 20, Indian corn 41, potatoes 226, turnips 456 bushels to the acre. The potatoes and fruits command good prices in the English market. Soil and production.

Ship-building is one of the staple industries of the province, but its manufactures generally are increasing rapidly. There are manufactories of woollen and cotton goods, boots and shoes, leather, carriages, wooden ware, paper, soap, hardware, etc., etc. Manufacture.

NOVA SCOTIA.

Grants of land in this province can be obtained for 44 dollars per hundred acres (about £9). Land in Nova Scotia.

The soil produces good crops of cereals and roots, and large quantities of apples are grown for export. Soil.

The value of the fisheries in Nova Scotia in 1876 was upwards of £1,000,000 sterling, consisting of cod-fish, mackerel, haddock, herring, lobsters, etc. Fisheries.

Nova Scotia contains large tracts of woodland which produce timber for ship-building and lumber chiefly for export.

Gold, iron, coal, and gypsum are found in large quantities. Minerals.

There are several railways in the province, giving it communication with other parts of Canada. Railways.

Halifax, which is the chief city of the province, is the winter port of the Dominion. It possesses a fine harbour, and is connected by railways with all parts of the continent.

PRINCE EDWARD ISLAND.

Most of the lands in this province are taken up, but improved farms can be obtained from about £4 per acre. Price of lands.

A full description of this province will be found in Professor Sheldon's report.

BRITISH COLUMBIA.

This province, which includes Vancouver's Island, is the most western of the provinces which constitute the Dominion of Canada, its boundaries being the Rocky Mountains on the east, and the Pacific Ocean on the west. General Description.

It possesses many fine harbours, one of which (Burrard Inlet) will probably form the terminus of the Canadian Pacific Railway when completed; and 125 miles of the line in this province are now under contract.

Heads of families, widows, or single men, can obtain free grants of land from 160 to 320 acres according to locality; the fee is about 7 dollars. Land.

Surveyed lands can be purchased at 1 dollar per acre, payable over two years; and improved farms cost from £1 to £8 per acre.

British Columbia has a large extent of valuable timber land, productive fisheries, which are increasing in value yearly; gold and coal are also found in large quantities. The yield of gold from 1858 to 1876 was equal to about 40,000,000 dollars.

ADDENDA.

EXTRACT FROM A MEMORANDUM PREPARED BY LIEUTENANT-COLONEL J. S. DENNIS, DEPUTY MINISTER OF THE INTERIOR OF THE GOVERNMENT OF CANADA, ON THE SUBJECT OF FREE GRANTS OF LAND AND OTHER INFORMATION BEARING ON THE PRICE OF LANDS, ETC., ETC.

CANADA offers to actual settlers, and heads of families or male persons over the age of 18, free lands on the following terms:

Every such person has the choice of all unoccupied lands surveyed and open for settlement.

On selecting the quarter section or 160 acres which he desires to settle on as a homestead, he appears at the nearest land office, and has his name entered for it, paying at the time a fee of £2, as evidence of his intention to settle on the land, cost of the surveys, and necessary documents, etc., which is all the land costs him, as, by residing on and cultivating the same to a reasonable extent, according to his means, for three years, he becomes entitled to, and receives a conveyance in fee simple for the land from the Crown. He is allowed a period of two months (which is counted part of the three years' occupation), after having his name entered and paying the £2 fee, within which to move his family on the land.

If desired by the settler, he will be permitted at the time of getting his name entered at the land office for his homestead or free grant, to have his name entered also for a second quarter section or tract of 160 acres adjoining his homestead; this is called his pre-emption land. He pays on this also at the time a fee of £2, which is all the money required of him on account of the same till he has fulfilled his three years' residence on his homestead, when he will have to make a payment on his pre-emption land of four-tenths of the price thereof, together with three years' interest on the price, at 6 per cent. per annum, after which he pays at the rate of one-tenth each year for six years, with interest at the above rate, when he will receive a conveyance in fee simple of the land from the Crown.

The price of the pre-emption land varies according to the distance it may be from railway accommodation. For instance, if the settler chooses his homestead within forty miles of the railway the price will be 10s. per acre; but if between forty and sixty miles, 8s.; and if more than sixty miles distant, 4s. per acre.

The settler therefore has it within his power to obtain a property of 320 acres of the best farming land for (in any case) the maximum sum of £84, the payment of which is purposely arranged to meet the circumstances of persons of limited means (only £4 having to be paid at the time of entry), and may be shortly stated as follows:

To be paid in cash at the time of entering for his land ...	£4	0	0
At the end of three years from that time	32	0	0
Leaving due, payment of which is made in six subsequent annual instalments of £8 each	48	0	0
Total	£84	0	0

Should the land be situate in the Four Shilling Belt, the outlay of the settler to secure his 320 acres would stand thus:

To be paid in cash as above	£4	0	0
At the end of three years from that time	12	16	0
Leaving due, to be paid in six annual instalments of £3 4s. each	19	4	0
Total	£36	0	0

It is to be understood, that in either case, as before stated, interest at the rate of 6 per cent. per annum is to be paid on the purchase-money of the pre-emption land, or so much thereof as remains from time to time unpaid.

The mode of survey of the lands is uniform.

The Townships are laid out in squares of six miles each—that is, six miles on each side—these are divided into single mile squares called sections, which are in turn subdivided into quarter sections or half-mile squares, containing 160 acres each.

The Sections or mile squares (640 acres each) are uniformly numbered from the South-Easterly to the North-Easterly angle, 1, 2, 3, 4, etc., etc.. etc., making 36 sections in all.

The Government have declared that the odd-numbered sections, viz.: 1, 3, 5, 7, 9, etc., etc., etc., in each Township shall be railway lands, *i.e.*, lands to be sold to realise a fund to pay for the construction of the Canadian Pacific Railway, and the even-numbered sections, as 2, 4, 6, 10, 12, etc., etc., are set apart for free homesteads and pre-emptions. Four sections, 11 and 29, and 8 and 26, are reserved in each Township —the first two of which represent a public endowment for schools—and the latter represent the one-twentieth of the lands in the territories the property of the Hudson's Bay Company.

By this it will be seen that provision is made for thirty-two homesteads and an equal number of pre-emptions, that is to say for thirty-two families *in each Township*, leaving an equal area of railway lands, which, if desired by them, may be purchased by the occupiers of adjoining homesteads and pre-emptions.

The railway lands are sold at prices ranging from £1 within 5 miles of the railway, to 8s. at 60 miles, outside of which the price is 4s. per acre, and the payment of the purchase-money is spread over nine years, with 6 per cent. interest on the balance remaining from time to time unpaid.

Should it be considered essential in carrying out a scheme to settle communities on homestead lands, provision could no doubt be made accordingly. The undersigned would however observe, that experience in Canada has proved beyond question that those settlements succeed best on which people from the older provinces are found intermixed with the new-comers. Those people are practical and self-reliant and educated in the ways of the country, and the example furnished by even a few of such settlers among a number of old countrymen, is of great value to the latter in showing them how to build houses and stables, to break up land, to provide for stock through the winter, etc., etc.

2. Upon arrival in Manitoba the settlers will be received by agents specially appointed for the purpose, who will advise and guide them to the lands which may have been selected by them.

The Dominion Government some years ago obtained an Act to encourage Immigration, by which it was provided that persons advancing money to pay the passage of immigrants and place them on homesteads, to erect buildings, to furnish them also with the necessary farm implements and seed grain, and with food sufficient to carry them over till they were able to obtain a crop, would be secured in each case to the extent of 200 dollars, equal to £40, with interest thereon at the rate of 6 per cent. per annum till paid, by the same being made a lien on the homestead of the immigrant, and that no patent for the land should be granted by the Crown till such sum and interest had been paid. This provision was however not taken advantage of to any extent, and upon the adoption of the system of alternate homestead and pre-emption lands and railway lands, it was repealed. As the proposal to assist settlers on their giving security seems to meet with general favour in England, the Canadian Government intend to introduce a measure which will doubtless become law, extending the

provisions of the repealed Act so as to secure repayment of any moneys advanced for the purposes above mentioned.

There is no reason whatever, so long as people are sober and industrious, to doubt of their success. The productive character of the land, the facility with which it may be placed under crop, there being no forest to be cleared, and no other difficulty in case the emigrant arrives on the land early enough in the season, in taking off a crop the same year, and finally the certainty of being able to get remunerative prices for everything he can raise, through the local demand caused by the constant and rapid influx of population and the construction of public works in the Territories, all contribute to render certain a measure of success to the emigrant, co-extensive with his personal thrift and industry.

The climate of the territories is undoubtedly healthy and congenial to the constitutions of the inhabitants of Europe.

The prospects of married men, who, without means, are placed with their families on homesteads, are rendered all the better from the fact that for some years the demand for labour in connection with the construction of railways now progressing, and of others contemplated, will afford them opportunities after the crops are put in, and then again in the autumn after harvest, and through the winter, of supplementing the profits of the farm by earnings which will enable them the sooner to make their families comfortable, and to pay off the moneys which may have been advanced for their benefit.

Under the conditions of the Homestead Law three years' occupation of the land is required in order to entitle the settler to the full ownership of the same, but the settler may be absent from his homestead for six months in each year of the said period, and where the man's family remain on the land and work it to a reasonable extent (which may well be done where there are children of sufficient age), the head of the family may, if he chooses, work away from home throughout the whole of each year.

The average wages paid at the present time to men working on railway construction in that country are 6s. per day, out of which they pay for board 2s. per day or 12s. per week, leaving them nett 4s. per day for their labour.

With regard to the amount of money which would be necessary to pay the emigration expenses of an average family of the poorest class, and place them on land in the North-West, under circumstances which would ensure their subsistence till they obtained a crop, it is safe to say that from £80 to £100 judiciously expended would cover the expense. A portion of this sum would require to be spent for actual necessaries of a character such as outfit, household requirements, and clothing, which people able to pay their own way would already have in possession. A family of the class last referred to, therefore, going out independently, could, by careful management, place themselves comfortably on land at a considerably less cost than the sum mentioned.

INFORMATION FOR INTENDING SETTLERS IN CANADA.

The best time to start for Canada is at the beginning of April.

When it has been decided to go, one of the Canadian Steamship Lines, whose advertisements can be found in the newspapers, should be written to, so as to secure a berth. There are vessels sailing from Liverpool, London, Bristol, Glasgow, Londonderry, and Cork.

The fare from any of the places named to Quebec, the port of landing in Canada, depends upon the class of passage that is taken. The saloon fare ranges from £10 to £18; the intermediate is £8 8s.; and the ordinary steerage passage is £6 6s., but agriculturists and domestic servants have the benefit of a lower rate, which can be ascertained from the Steamship offices, or at any of the Government offices, who will also supply the necessary forms to be filled up: children under ten years are charged half-fare, and infants under one year a nominal sum. The fares include a plentiful supply of food, and good sleeping accommodation on board.

To Manitoba *through* tickets are issued by all the Steamship Companies. The fare from London or Liverpool to Winnipeg ranges from £9 10s. assisted steerage, to £28 the saloon passage. Passengers are advised to take advantage of these tickets.

To secure a berth in the steamers it is necessary to send a deposit of £5 for a saloon passage; £1 for an intermediate or a steerage passage.

Twenty cubic feet of luggage are allowed to *each* saloon passenger, ten to *each* intermediate, and ten to *each* steerage.

Any information or advice as to the most useful things to take to Canada, or upon any other subject, may be obtained at the offices of the Steamship Companies, or at any of the Canadian Government offices.

Steerage passengers have to provide bedding, and certain utensils for use on board, which are enumerated in the bills of the Steamship Companies. They can be purchased at the port of embarkation, or hired for the voyage, from some lines—for a few shillings—leaving bed covering only (a rug or blanket) to be provided by the passenger.

Government agents are stationed at the principal places in Canada, and they should be inquired for on arrival. They will furnish information as to free grant and other lands open for settlement in their respective provinces and districts, farms for sale, demand for labour, rates of wages, route of travel, distances, expenses of conveyance; receive and forward letters and remittances for settlers, and give any other information that may be required.

Persons with capital should not be in a hurry to invest their money. They can get good interest for it by depositing it in the banks, and can give themselves time to look around before settling. There is good banking accommodation in most of the towns, and letters of credit can be obtained from any of the English Banks.

The classes which may be recommended to emigrate to Canada are as follows:—

1. Tenant farmers, who have sufficient capital to enable them to settle on farms, may be advised to go with safety and with the certainty of doing well. The same remark will apply to any persons who, although not agriculturists, would be able to adapt themselves to agricultural pursuits, and who have sufficient means to enable them to take up farms.

2. Produce farmers and persons with capital, seeking investment.

3. Male and female farm labourers, female domestic servants and country mechanics.

The classes warned against emigration are females above the grade of servants, clerks, shopmen and persons having no particular trade or calling, and unaccustomed to manual labour. To this class Canada offers but little encouragement.

The following are the Government agencies in Great Britain and Ireland:

CHIEF OFFICE: 10, VICTORIA CHAMBERS, LONDON, S.W.,
MR. J. COLMER, SECRETARY.

LIVERPOOL...MR. JOHN DYKE, 15, Water Street.
GLASGOW.....MR. THOMAS GRAHAME, 40, St. Enoch Square.
BELFAST .....MR. CHARLES FOY, 29, Victoria Place.
DUBLIN .....MR. THOMAS CONNOLLY, Northumberland House.
BRISTOL .....MR. J. W. DOWN, Bath Bridge.

Intending settlers should communicate with these officers if in want of any information or advice: and should arrange, if sailing from any of the above places, to call upon the Government Agent before their departure.

The following are the agents of the Canadian Government in Canada:—

OTTAWA .....MR. W. J. WILLS, St. Lawrence and Ottawa Railway Station, Ottawa, Ontario.
TORONTO.....MR. J. A. DONALDSON, Strachan Avenue, Toronto, Ontario.
MONTREAL...MR. J. J. DALEY, Montreal, Province of Quebec.
KINGSTON ...MR. R. MACPHERSON, William Street, Kingston.
HAMILTON...MR. JOHN SMITH, Great Western Railway Station, Hamilton.
LONDON .....MR. A. G. SMYTHE, London, Ontario.
HALIFAX .....MR. E. CLAY, Halifax, Nova Scotia.
ST. JOHN.....MR. J. LIVINGSTONE, St. John, New Brunswick.
QUEBEC .....MR. L. STAFFORD, Point Levis, Quebec.
WINNIPEG ...MR. W. HESPELER, Winnipeg, Manitoba.
DUFFERIN...MR. J. E. TÉTU, Dufferin, Manitoba.

ROOTS AND VEGETABLES IN CANADA.

The following certificate has been given by Messrs. Sutton and Sons, Seedsmen, of Reading, in reference to the Canadian roots and vegetables exhibited on their stand at the Smithfield Club Cattle Show in December last.

'Reading, Dec. 21st., 1880.

'We were honoured by the Canadian Government forwarding for exhibition on our stand at the Smithfield Club Cattle Show, 1880, a collection of roots, etc., grown in Manitoba and Ontario, of the following weights, when harvested.

Squash	313 lb.
Long Red Mangel	75 „
Long Yellow Mangel	65 „
Yellow Globe Mangel... ...	60 „
Field Pumpkin	37 „
Citron	30 „

'These enormous specimens proved objects of great interest to the British farmers, and we believe the weights far exceed any on record.

'(Signed) SUTTON AND SONS.'

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THE DOMINION OF CANADA

THE NEAREST BRITISH COLONY.

AREA ABOUT 3,500,000 SQUARE MILES.

SHORTEST SEA PASSAGE, CHEAPEST FARES, LIGHT TAXES
CHEAP FOOD, FREE SCHOOLS.

FREE GRANTS of LAND

(160 ACRES) CAN BE HAD IN

MANITOBA AND THE NORTH WEST TERRITORY,

And from 100 to 200 Acres in the other Provinces of Canada.

Further quantities can be purchased on reasonable terms, and on easy conditions.

Improved Farms with Buildings, &c., can be purchased in the old settled Districts at from £4 to £12 per acre.

CATTLE and SHEEP and DAIRY PRODUCE

EXPORTED LARGELY EVERY YEAR.

Pamphlets (including the Chapter of the "Colonization Circular" relating to Canada, *printed under the authority of the Imperial Colonial Office*, and the Reports of the *British Tenant Farmers* on the country), and other information supplied post free, or on personal application at the Canadian Government Offices.

Offices are Read
and File